ALASKA DEPARTMENT OF FISH AND GAME

DIVISION OF COMMERCIAL FISHERIES

ANNUAL MANAGEMENT REPORT

1973

COOK INLET MANAGEMENT AREA

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PREFACE

The 1973 Cook Inlet Annual Management report is divided into two main sections, each having a separate numbering system. The first section (I) of the report gives a general overview on the Cook Inlet Management area and then deals specifically with the salmon gill net fishery of the Northern and Central districts of upper Cook Inlet. The second section (II) presents information on lower Cook Inlet (south of Anchor Point) which includes the Southern, Outer, Kamishak, and Eastern districts. Statistics on the shellfish and herring fisheries as well as the salmon seine fishery appear in Section II.

The statistics on salmon in this report through 1973 can be considered to be final. The statistics on shellfish and miscellaneous fish through 1972 are final; however, 1973 figures are preliminary and subject to minor changes.

Since plans call for dividing the Cook Inlet area into two management areas in 1974, this will be the last Commercial Fisheries Annual Management report that covers both the upper and lower districts of Cook Inlet.

ACKNOWLEDGEMENTS

The Cook Inlet management staff would like to thank Regional Supervisors Kenneth R. Middleton and Steven Pennoyer for their support and leadership during 1973. We would also like to express our appreciation to the research team of Al Davis and Bruce Barrett who supervised much of the field work conducted in the upper Inlet.

1973 Cook Inlet Management Staff

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The staff would also like to acknowledge the many temporary employees who assisted with the various field projects in the Cook Inlet area during 1973. A list of these employees appears in the Appendix of Section I.

We would also like to acknowledge Debby Sickman for her work on typing this report.

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INTRODUCTION

Cook Inlet Management Area

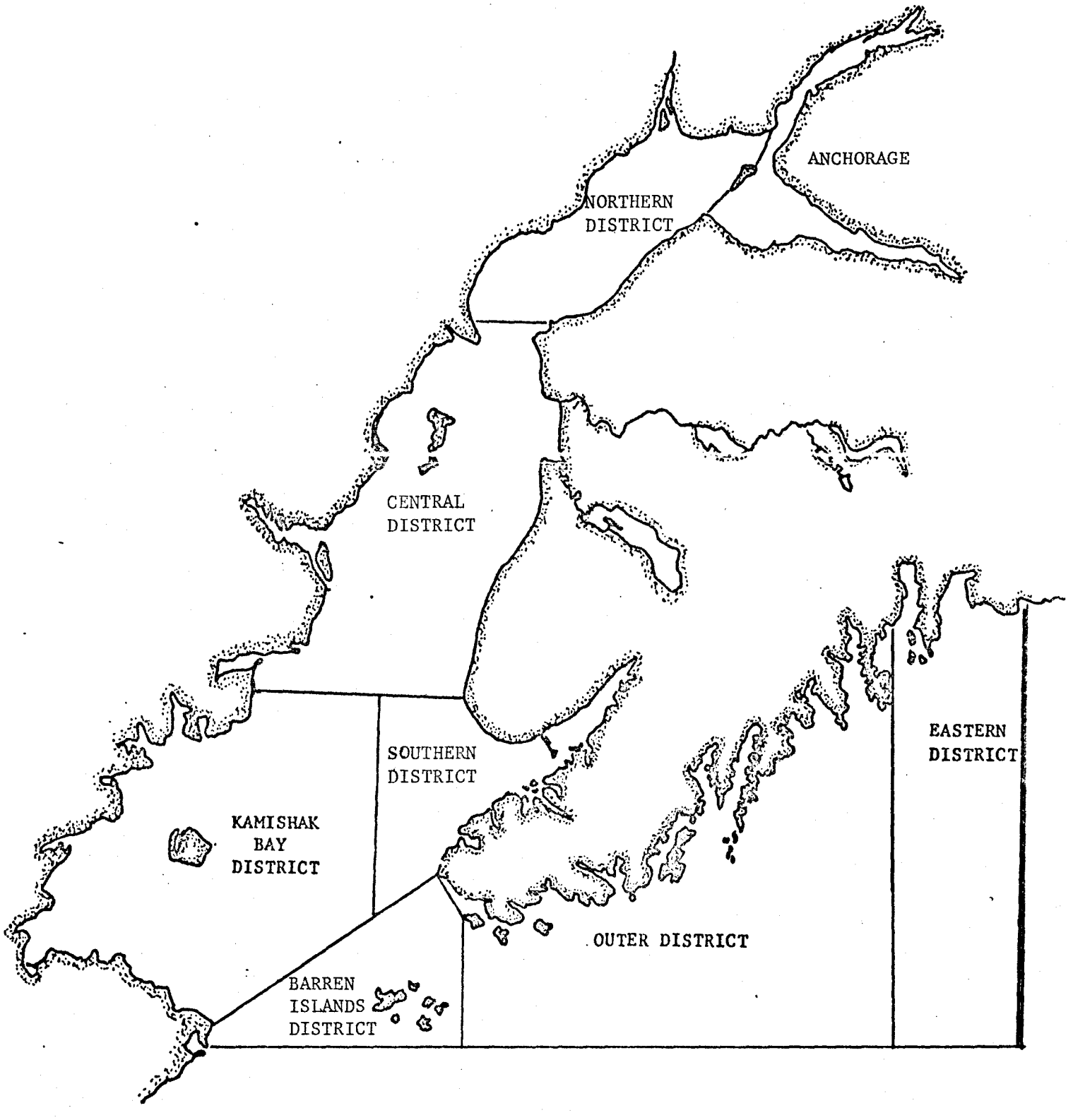
The Cook Inlet area includes, in addition to Cook Inlet, those waters between Cape Douglas on the Alaska Peninsula and Cape Fairfield in Blying Sound east of Seward. There are seven fishing districts in the area: two in Cook Inlet north of Anchor Point (Northern and Central), one in Kachemak Bay near Homer (Southern district), one on the west side of the lower inlet (Kamishak district), one at the mouth of Cook Inlet (Barren Islands), one along the outer coast from Point Adam to Aialik Cape (Outer district), and one south of Seward in the Resurrection Bay-Blying Sound area (Eastern district). (Figure 1)

Salmon

Salmon were first taken in the area in 1882 although no records of the number of fish harvested are available until 1893. Sockeye salmon have been the dominant species historically, however, in the last 20 years the pink salmon catch has been the greatest. Since 1954 pink salmon have comprised 43% of the total Cook Inlet management area catch, followed by sockeye (29%), chum (21%), coho (6%), and king (1%). (Appendix Table 4) The gill net districts north of Anchor Point harvest all five species of Pacific salmon with the largest overall runs occurring in even-numbered years. Set nets only are allowed in the Northern district (north of Boulder Point) while both set net and drift gear are permitted in the Central district (between Boulder Point and Anchor Point). The proportion of the catch has varied between drift and set net gear with drift gear taking a slightly higher percentage of the catch since 1960. (Appendix Table 3)

Figure 1

ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF COMMERCIAL FISHERIES
COOK INLET - RESURRECTION BAY AREA



The Southern district, which is primarily Kachemak Bay, yields mostly pink salmon although other species are harvested. There are about 12 set net sites along the southern shore of the district and they harvest primarily red salmon while the seine fleet relies mostly upon pinks and chums.

Seine gear only is allowed in the Kamishak Bay district and the catch is made up of primarily pink and chum salmon. The Barren Islands district is a shellfish management district and there are no salmon harvested from this area. In the Outer district only seine gear is allowed and the catch is composed of mainly pink and chum salmon. In some years there is a small red salmon fishery in the Nuka Bay area. The Eastern district is the least important commercial salmon district in the Cook Inlet management area. There are fair pink runs in some even years. The district has potential for sockeye salmon production, however, the main producing system, Bear Lake, is presently being managed for silver salmon by the Sport Fish Division.

Shellfish

King crab, tanner crab, dungeness crab, and shrimp are harvested commercially in the Southern, Outer, Kamishak, Barren Islands, and Eastern districts. There is virtually no fishing for these species north of Anchor Point although they are all known to exist in the Central district.

King crab were first fished commercially in 1951 and since 1960 the catch has averaged about 4.6 million pounds. Tanners were first fished commercially in 1968 and since that year the average catch has been 3.6 million pounds.

There was an active trawl fishery for shrimp in lower Cook Inlet during the early sixties before the earthquake destroyed processing facilities in Seldovia and Seward. The fishery resumed in 1969 in Kachemak Bay and is now under a 5.0 million pound annual quota. The pot shrimp fishery is expanding rapidly in Kachemak Bay and quota management is likely in the near future.

The Cook Inlet dungeness crab fishery has taken place almost entirely within Kachemak Bay and catches have been sporadic. The catch has averaged about 300 thousand pounds since 1961 with the peak production of 1.7 million pounds occurring in 1963.

The razor clam fishery has been insignificant since the early sixties when there was a substantial fishery at Polly Creek. The stocks are in excellent shape at Polly Creek and as soon as market conditions and restrictive health regulations are straightened out this fishery will become active again.

Other Fisheries

The only other significant fishery in Cook Inlet at the present time is the herring fishery, primarily directed at sac roe. This fishery has developed since 1969 and fishing effort was primarily concentrated in Resurrection and Kachemak Bay until this year when it expanded into the Outer and Kamishak Bay districts. The fishery has been almost exclusively seine, however, this year there was a limited gill net fishery in the Central district.

There is a substantial subsistence fishery in Cook Inlet which takes place primarily along the east shore of the inlet and in Kachemak and Resurrection Bays. Salmon, shellfish, herring, smelt, and bottomfish are all taken at various seasons of the year.

1973 SEASON SUMMARY

Salmon Fishery

The 1973 commercial salmon catch for the Cook Inlet area totaled 2,227,767 and was the highest odd-year average since 1955. (Appendix Table 4)

The catch by species was 5,339 kings (.24%), 699,234 sockeye (31,38%), 106,521 cohos (4.78%), 633,587 pinks (28.45%), and 783,086 chums (35.15%).

The Central district contributed the largest share of the catch with 1,535,560 total salmon (68.93%) followed by the Outer district 278,695 salmon (12.51%), Northern district 237,836 salmon (10.68%), Southern district 126,614 salmon (5.68%), Kamishak district 58,181 salmon (2.16%), and finally the Eastern district with 808 salmon (.04%).

The drift gill net catch accounted for 1,105,362 salmon (49.62%), set nets took 715,896 salmon (32.13%), seines 405,701 salmon (18.21%) and troll gear accounted for 808 salmon (.04%).

Salmon gear registrations for 1973 totaled 1,559, up 178 from 1972. The registration by gear was 662 drift, 775 set net, 91 seine, and 31 troll. Of the total 1973 registrations for all salmon gear 88% were residents and 12% non-residents. Appendix Table 2 shows salmon gear registrations by category and the amount of active gear or gear fished for each year since 1966.

Shellfish Fishery

This section of the report is presented as an overview of the Cook Inlet shell fisheries. More detailed information is presented in Section II of this report.

There was a dramatic increase in shellfish pot registrations in 1973. A record high of 186 shellfish pot licenses were were sold in 1973 compared to a previous high of 124 during 1971. (Appendix Table 1) The Limited Entry program was largely responsible for this increase. Fishermen were afraid that if they did not register for 1973 they would not be eligible for a permit in future years.

The total shellfish harvest for 1973 was 18.1 million pounds. The shellfish harvest by species was 8.5 million pounds of tanner crab, 4.4 million pounds of king crab, 310 thousand pounds of dungeness crab, 4.9 million pounds of shrimp, and 34 thousand pounds of razor clams. The total value to fishermen of all shellfish products was approximately 5 million dollars. Two management districts, the Southern (Kachemak Bay) and Kamishak, contributed about 90% of the total Cook Inlet shellfish catch.

Herring Fishery

The 1973 herring harvest of 3.2 million pounds (1600 tons) was the second highest in recent Cook Inlet history, exceeded only by the 1970 catch of 9.6 million pounds (4,800 tons). All management districts except the Northern and Barren Islands districts contributed to the catch with the largest share coming from the Eastern district (49%).

SALMON FISHERY

Northern District

Commercial Fishery: A total of 237,836 salmon were harvested from the Northern district in 1973. This was the best odd-year catch for the Northern district since 1959 and the second best catch on record since 1954. (Appendix Table 5) The catch by species was 170 kings; 45,614 sockeye; 23,951 coho; 137,250 pinks, and 30,851 chums.

The king salmon catch was the second lowest on record, mainly due to the late opening (July 2). The sockeye catch was comparable to recent odd years although it was a little less than half the 20-year average. The coho catch was the best since 1970 although it was still about 12 thousand below the odd-year average. The pink catch was the highest odd-year catch by far in the history of Cook Inlet. The chum catch was the best odd year catch since 1967 although it was still about 10 thousand below the odd-year average. The 1973 Northern district catch by period, by species appears in Table 1.

There were four emergency orders issued for the Northern district during the 1973 salmon season. These emergency orders are discussed in detail under the Central district salmon fishery section.

Field Operations

Effort Surveys: Aerial surveys of the fishery were made periodically during the season in order to assess the amount of gear in use. The first survey was conducted on July 2 and the last on August 13. Table 2 lists each survey by date broken down by section of beach. Peak effort occurred on July 23 when 317 nets were counted in the waters of the Northern district.

Table 1.
1973 Cook Inlet salmon catch[1/]
by species
Northern District

Date	Period	Kings	Reds	Cohos	Pinks	Chums	Totals
June 25	01	9	7		1		17
29	02		29		21		50
July 2	03	30	249	10	846	4	1,139
6	04	29	2,683	37	9,150	100	11,999
9	05	30	8,383	785	19,294	2,231	30,723
13	06	14	6,357	1,299	29,669	273	37,612
16	07	17	4,731	1,431	29,039	493	35,711
18	08[2/]	11	5,407	2,873	24,718	686	33,695
20	09[2/]	9	5,720	2,781	9,590	2,514	20,614
23	10	7	8,456	5,433	10,650	6,386	30,932
25	11	4	2,220	3,797	2,189	2,205	10,415
27	12	2	517	1,521	903	1,671	4,614
30	13	4	301	603	497	177	1,582
Aug. 1	14	2	286	1,216	313	6,186	8,003
3	15	1	61	161	84	127	434
6	16		117	490	105	4,470	5,182
8	17	1	67	590	128	2,768	3,554
10	18		15	175	48	283	521
13	19		4	40	3	82	129
17	20		1	12	2	10	25
20	21		1	102		116	219
24	22		1	107		64	172
27	23		1	90		3	94
31	24						
Sept. 3	25			70			70
7	26			58			58
10	27			79			79
14	28			37		1	38
17	29			51		1	52
21	30			103			103
TOTALS:		170	45,614	23,951	137,250	30,851	237,836

[1/] Compiled from 1973 IBM statistical run by H. Vanderbrink, 10-24-74.
[2/] 6-hour period.

Table 2 . Aerial surveys of the Northern district, Cook Inlet, 1973.

Date	Units of set net gear[1/]			
	Fire Island	East side	West side	Total
7/2	2	73	40	115
7/9	10	111	115	236
7/16	8	107	136	251
7/18	2	86	116	204
7/23	17	133	167	317
7/30	3	64	45	112
8/13	0	---	27	27

[1/] One unit equals 35 fathoms.

Talachulitna Tower: A counting tower was in operation at the mouth of the Talachulitna River for the second year in a row. An estimated 113 thousand salmon passed into the Talachulitna while the tower was in operation from July 5 to August 14. The primary species passing the tower were pink salmon (92,496) and sockeye salmon (19,727). Table 3 gives the daily counts by species for 1973.

Fish Creek: A total of 2,705 sockeye salmon were counted through the Fish Creek weir during 1973 while the weir was in operation from July 1 through September 6. Appendix Table 9 shows the dates of the operation, the count by species, and the method of enumeration for each year from 1936 to 1973.

Field operations conducted in the Northern district are reported on in more detail in the 1973 Cook Inlet Sockeye Salmon Technical Report by Davis, Barrett, Barton (in press).

Central District

A total of 1,535,560 salmon were harvested from the Central district in 1973. The catch by species was 5,024 kings; 624,411 sockeye; 80,469 cohos; 188,934 pinks; and 636,722 chums. The total catch was the best for an odd year since 1967 and was about 200 thousand above the average odd-year catch since 1954. Appendix Table 6 presents the salmon catch by species for the Central district from 1954 through 1973.

The 1973 catch by species by date for the Central district appears in Table 4 and the catch by gear in Table 5. The king salmon catch of 5,024 was the lowest since 1968 and was about 10 thousand below the average catch since 1954. A major factor in the low catch was the late opening date of June 25 which eliminated any harvest from the early run of kings.

Table 3 . Talachulitna River salmon escapement by species, as derived from tower count data, 1973.

Date	Sockeye # of Fish	Pink # of Fish	Chum # of Fish	Coho # of Fish	King # of Fish
July					
5					3
6					1
7					0
8					0
9					0
10					0
11	9	7			39
12	65	100			55
13	51	53			8
14	117	77	4		9
15	307	893	8		13
16	1,219	1,360	1		33
17	1,878	1,672	32		9
18	1,580	761	12		1
19	3,789	2,235	24		21
20	2,228	2,843	25		8
21	1,141	2,797	24		11
22	1,008	6,262	39		17
23	719	1,992	29		8
24	651	1,206	12		11
25	731	6,553	27		13
26	560	4,264	33		11
27	399	2,795	21		3
28	604	2,661	12		-1
29	359	2,277	9		5
30	227	2,261	35		1
31	159	3,014	9		3
August					
1	417	3,445	31		1
2	407	4,387	24		0
3	257	4,358	51	1	3
4	188	4,609	31	0	1
5	205	6,221	36	0	0
6	101	3,224	27	3	1
7	159	2,869	16	0	1
8	41	2,722	17	0	0
9	57	2,618	28	0	1
10	27	2,584	12	0	0
11	24	3,233	15	0	3
12	15	2,009	24	1	-1
13	15	1,898	20	2	0
14	16	1,736	19	1	4
TOTAL:	19,727	92,496	707	8	291

Table 4.
1973 Cook Inlet salmon catch[1/]
by species, by period.
Central District

Date	Period	Kings	Reds	Cohos	Pinks	Chums	Total
June 25	1	409	2,128		227	48	2,802
29	2	110	5,205	11	1,434	154	6,914
July 2	3	142	13,315	82	4,848	1,280	19,667
6	4	361	41,635	804	34,521	5,431	82,752
9	5	551	68,304	2,562	19,033	5,948	96,398
13	6	377	154,337	8,017	57,470	21,153	241,354
16	7	235	111,224	7,494	50,835	18,986	188,774
18	8[2/]	185	78,486	5,567	9,395	14,713	108,346
20	9[2/]	243	45,843	4,142	3,673	13,060	66,961
23	10	436	45,467	6,515	4,810	85,952	143,180
25	11	365	22,392	4,391	1,223	58,872	87,243
27	12	254	11,219	3,638	550	86,625	102,286
30	13	315	11,889	6,588	330	129,752	148,874
Aug. 1	14	364	6,404	4,415	179	55,804	67,166
3	15	269	3,072	3,840	151	67,186	74,518
6	16	140	1,717	3,515	65	14,982	20,419
8	17	138	950	2,554	60	22,644	26,346
10	18	28	521	2,594	52	20,329	23,524
13	19	33	168	2,385	33	6,709	9,328
17	20	27	66	1,971	23	4,909	6,996
20	21	25	44	2,068	10	1,505	3,652
24	22	11	14	1,727	3	425	2,180
27	23	3	3	781	8	223	1,018
31	24	1	1	524	1	4	531
Sept. 3	25	1	3	849		29	882
7	26		2	780		1	783
10	27		1	1,051		3	1,055
14	28	1		608		2	611
17	29			422		1	423
21	30			398		2	400
24	31		1	175			176
28	32			1			1
	TOTAL	5,024	624,411	80,469	188,934	636,722	1,535,560

[1/]Compiled from 1973 IBM Statistical run by H. Vanderbrink; 10-29-74.
[2/]6-hour period

Table 5.
1973 Cook Inlet salmon catch[1/]
by species, drift and set net gear
Central District

Date	Period	Kings	Reds	Cohos	Pinks	Chums	Totals
June 25	1 drift	5	51		8	15	79
	set	404	2,077		219	23	2,723
June 29	2 drift	3	220	1	66	42	332
	set	107	4,985	10	1,368	112	6,582
July 2	3 drift	17	3,976	34	1,467	1,068	6,562
	set	125	9,339	48	3,381	212	13,105
July 6	4 drift	32	18,782	478	5,800	5,160	30,252
	set	329	22,853	326	28,721	271	52,500
July 9	5 drift	29	40,623	1,245	12,129	5,280	59,306
	set	522	27,681	1,317	6,904	668	37,092
July 13	6 drift	10	127,010	6,352	43,911	20,041	197,324
	set	367	27,327	1,665	13,559	1,112	44,030
July 16[2/]	7 drift	4	84,701	4,906	19,469	18,044	127,124
	set	231	26,523	2,588	31,366	942	61,650
July 18[2/]	8 drift	6	49,818	2,778	3,423	13,420	69,445
	set	179	28,668	2,789	5,972	1,293	38,901
July 20	9 drift	29	22,890	2,128	2,668	12,155	39,870
	set	214	22,953	2,014	1,005	905	27,091
July 23	10 drift	45	14,076	2,802	1,724	83,773	102,420
	set	391	31,391	3,713	3,086	2,179	40,760
July 25	11 drift	19	5,844	2,411	744	57,780	66,798
	set	346	16,548	1,980	479	1,092	20,445
July 27	12 drift	6	2,647	977	148	85,330	89,108
	set	248	8,572	2,661	402	1,295	13,178
July 30	13 drift	9	3,425	2,425	107	126,649	132,615
	set	306	8,464	4,163	223	3,103	16,259
Aug. 1	14 drift	8	658	759	88	53,165	54,678
	set	356	5,746	3,656	91	2,639	12,488
Aug. 3	15 drift	12	686	942	49	64,983	66,672
	set	257	2,386	2,898	102	2,203	7,846
Aug. 6	16 drift	6	87	532	24	11,491	12,140
	set	134	1,630	2,983	41	3,491	8,279
Aug. 8	17 drift	2	145	432	23	20,709	21,311
	set	136	805	2,122	37	1,935	5,035
Aug. 10	18 drift	1	38	657	21	16,325	17,042
	set	27	483	1,937	31	4,004	6,482
Aug. 13	19 drift		6	103	7	2,225	2,341
	set	33	152	1,358	18	870	2,431
Aug. 17	20 drift	1	1	381	12	3,301	3,696
	set	26	65	1,590	11	1,608	3,300
Aug. 20	21 drift		1	344	5	1,034	1,384
	set	25	43	1,724	5	471	2,268
Aug. 24	22 drift			101		62	163
	set	11	14	1,626	3	363	2,017
Aug. 27	23 drift			60		72	132
	set	3	3	721	8	151	886

Table 5 continued:

Date	Period	Kings	Reds	Cohos	Pinks	Chums	Totals
Aug. 31	24 drift			12			12
	set	1	1	512	1	4	519
Sept. 3	25 drift						0
	set	1	3	849		29	882
Sept. 7	26 drift						0
	set		2	780		1	783
Sept.10	27 drift						0
	set		1	1,051		3	1,055
Sept.14	28 drift						0
	set	1		608		2	611
Sept.17	29 drift						0
	set			422		1	423
Sept.21	30 drift						0
	set			398		2	400
Sept 24	31 drift						0
	set		1	175			176
Sept 28	32 drift						0
	set			1			1
Total drift		244	375,695	31,784	91,901	605,738	1,105,362
Total set		4,780	248,716	48,685	97,033	30,984	430,198
TOTAL CENTRAL		5,024	624,411	80,469	188,934	636,722	1,535,560

1/ Source: 1973 IBM statistical run.

2/ 6-hour period.

The sockeye catch of 642,411 was about 270 thousand below the 20-year average and was second lowest since 1960. Fishing time was held down and as a result good escapements were achieved in most systems for the third year in succession. The coho catch of 80,469 was about 60 thousand below the long-term average and was nearly identical to the last two odd years (1971: 78,542; 1969: 80,527). The coho catch would have been somewhat higher had fishing time not been severely restricted during August in an attempt to achieve more escapement into the Northern district. The pink salmon and chum salmon catches during 1973 represented the only bright spots in the Central district catch. The pink catch of 188,934 was the highest odd-year catch in Cook Inlet's history while the chum catch of 636,722 was the second highest in the Inlet's history for an odd year, exceeded only by the 1957 catch of 900 thousand. The chum catch was also over 100 thousand above the 20-year average, for both even and odd years, in the Central district.

There were five emergency orders issued for the Central district during the 1973 salmon season. The first emergency order opened the Central and Northern districts to a six-hour fishing period on Wednesday, July 18 from 3:00 P.M. to 9:00 P.M. The justification and reasoning behind this opening was (1) Sockeye salmon escapement into the Kenai River system was three times the average for the time of year. (2) Aerial observations indicated that the drift fleet missed the main concentration of sockeye in the Inlet on the previous Monday period and thus the catch was not an accurate portrayal of the run strength. (3) We felt that if we waited until Friday, sockeye in the Inlet might school up and concentrate off of Kalgin Island as they did in 1971, with the result of a

possible overharvest on certain stocks. (4) We wanted to evaluate the effectiveness of a six-hour period for management purposes. (5) There was an excellent odd-year pink run on and we wanted to better assess the timing and strength of this run. (6) The time (3:00 P.M.-6:00 P.M.) was selected so that all areas had some flood fishing with the northern parts of the district getting the best tides with the hope that proportionally a greater harvest would be achieved from the strong Kenai River sockeye run. (7) With a six-hour period on Wednesday we retained three options (a) fish a six-hour period on Friday, thus keeping total fishing time the same as established (12 hours); (b) add six hours and go with a 12-hour period on Friday if the Kasilof escapement picked up considerably; (c) delete Friday's period entirely if catch and escapement indicies were poor.

The catch (78 thousand sockeye) from Wednesday's six-hour period indicated a fair size body of sockeye in the district, however, escapement in the Kasilof did not increase substantially. The second emergency order of the season reduced fishing time in the gill net districts to six hours on Friday, July 20th. The justification and reasoning behind the six-hour fishing period on Friday was (1) Some fishing time was justified because of the strong run of sockeye to the Kenai River. (2) The sockeye catch of 78 thousand from the 6-hour period on Wednesday was considered to be good especially since the drift fleet was scattered from 15 miles north to 15 miles south of Kalgin Island. (3) A full 12-hour period could not be justified because of the continued weakness in the Kasilof sockeye run. (4) The alternative of not fishing at all on Friday and waiting until Monday was considered and the drawbacks of this action

were (a) The possibility of plugging the Kenai with sockeye (overescapement). (b) Inadequate assessment of Northern district sockeye run. (c) Inadequate assessment and harvest of apparent strong odd-year pink run. (d) The danger of sockeye stocks schooling off of Kalgin Island as they did in 1971, with the result of a possible over harvest of certain stocks. (5) The time of 6:00 A.M. to 12:00 noon was selected because (a) Set nets below Kasilof would have only ebb fishing and thus would not be too effective on Kasilof stocks which we were trying to protect. (b) Salamatoff set nets would have about one hour of flood and then some ebb fishing which we felt would result in a good harvest on Kenai stocks. (c) The Northern district would have three to four hours of flood fishing to harvest the strong pink run and provide some assessment at the peak of the sockeye run.

It is quite evident, as illustrated by the above discussion, that a major management problem arises when the strength of the Kenai and Kasilof River sockeye runs differ. We learned that our management subdistricts are useless, as they are presently established, when trying to control or adjust the harvest to the two different river systems. The basic problem lies in the fact that the mouths of the Kenai and Kasilof Rivers enter the same subdistrict (Kalifonsky). It was felt at the time that a major improvement in the subdistricts would be to establish a boundry line at the approximate middle of Kalifonsky beach, thus creating separate fishing districts for the Kenai and Kasilof Rivers.

The third emergency order affecting the Central and Northern districts was effective on July 25 and opened the Inlet to three, 12-hour periods per week. The justification and reasoning behind this action was:

(1) The catches from the previous period indicated that the sockeye run had peaked and was dropping off rapidly. (2) The Kasilof sockeye run was thought to be pretty well over, however, the catch distribution indicated some Kenai sockeyes still present in the upper Inlet along Salamatof beach and at the Kenai River mouth. (3) The chum salmon catch from the previous period was good and additional harvest on chums was warranted. (4) A drop in fishing effort was anticipated.

The fourth emergency order, effective on August 8, deleted the Wednesday fishing period in Chinitna Bay. The justification was poor chum salmon escapement at the head of Chinitna Bay coupled with increased effort in the bay.

The fifth and final emergency order affecting the Inlet fishery was effective on Wednesday, August 15. This action deleted the extra Wednesday 12-hour fishing periods in the gill net districts for the remainder of the season. The justification was (1) Poor coho salmon escapement in the Northern district. (2) The chum salmon run was over.

Field Operations

Escapement: The 1973 sockeye salmon escapement into the Kenai River was the highest recorded since sonar counters were first installed in 1968. The total sonar count was 380,866 with fishwheel apportionment resulting in a sockeye count of 368,369. (Table 6) A very large number of these sockeye spawned in main stem of the Kenai River between Cooper Landing and Skilak Lake. The late run escapement into the Russian River system of only 24,974 and the total index count from other Kenai clear water systems of 15,745 did not reflect the magnitude of the total run into the Kenai system. Ordinarily the Russian River system contributes

Table 6 . Sonar counts apportioned by fishwheel catches from Kenai River, 1973.

SONAR			FISHWHEEL			
South Bank	North Bank	Total				
June 16 - July 14				Sockeye	Other	Total
20,098	49,882	69,980	%	97.3	2.7	
			F.W. Catch	180	5	185
			Sonar Count (Weighted)	68,091	1,889	
July 15 - July 20						
28,968	44,909	73,877	%	96.4	3.6	
			F.W. Catch	159	6	165
			Sonar Count (Weighted)	71,217	2,660	
July 21 - July 23						
27,131	63,892	91,023	%	96.3	3.7	
			F.W. Catch	235	9	244
			Sonar Count (Weighted)	87,655	3,368	
July 24 - July 25						
18,322	42,758	61,080	%	99.4	.6	
			F.W. Catch	174	1	175
			Sonar Count (Weighted)	60,714	366	
July 26 - July 28						
15,629	33,633	49,262	%	96.8	3.2	
			F.W. Catch	184	6	190
			Sonar Count (Weighted)	47,686	1,576	
July 29 - Aug. 8						
13,259	22,385	35,644	%	92.6	7.4	
			F.W. Catch	175	14	189
			Sonar Count (Weighted)	33,006	2,638	
TOTAL 123,407	257,459	380,866		368,369	12,497	

a substantial percentage of the total Kenai sockeye escapement; however, during 1973 it accounted for only 7%. By way of comparison the percentages for other years are 1972 - 29%; 1970 - 42%; 1969 - 56%; and 1968 - 43%. There is no useable data for 1971 as the sonar counters malfunctioned that year. Russian River sockeye escapement data since 1960 appears in Appendix Table 10.

The total sonar tally over the Kasilof River counters was 41,957 during 1973 with the fishwheel apportionment resulting in a sockeye count of 40,189. (Table 7) This was the second lowest escapement recorded since sonar counters were installed in 1968. The index count, derived from ground surveys in the clearwater streams which flow into Tustumena Lake, was 25,083, or about 12,000 below the average count since surveys began in 1966. In comparing the 1973 index count with the eight years for which survey data is available it ranks as the 5th highest or, if you prefer, the 4th lowest on record. (Appendix Table 11)

Sonar counts for the Kenai and Kasilof Rivers by date since 1968 appear in Appendix Tables 14 through 17.

Effort surveys: Aerial surveys to determine fishing effort and catch distribution commenced on July 2 and ended on August 13. The number of drift boats as well as the number of set nets observed fishing were recorded on eleven different surveys during the season. The results of these 1973 effort surveys appear in Table 8.

Scale sampling: (1) Commercial catch - Sockeye salmon taken in the Central district were sampled for age,length, and sex after each fishing period. Samples were taken from both the set net and drift fishery. Appendix Table 18 gives the age data for sockeye harvested in the Central

Table 7. Sonar counts apportioned by fishwheel catches on the Kasilof River, 1973.

SONAR			FISHWHEEL			
South Bank	North Bank	Total				
June 19 - July 14				Sockeye	Other	Total
-0-	19,268	19,268	%	95.3	4.7	
			F.W. Catch	163	8	171
			Sonar Counts (Weighted)	18,362	906	
July 15 - Aug. 4						
2,539	20,150	22,689	%	96.2	3.8	
			F.W. Catch	276	11	287
			Sonar Counts (Weighted)	21,827	862	
TOTAL:						
2,539	39,418	41,957		40,189	1,768	

Table 8. Aerial surveys of Central district, Cook Inlet, 1973.

Date	Units of Set Net Gear[1]					Drift Units[2]
	Ninilchik to Kasilof	Kalifonsky	Kenai to Boulder Point	Kalgin Island	Lower West Side[4]	Central Drift Boats[3]
7/2	133	19	41	59	82	45
7/6	223	47	---	31[5]	---	175
7/9	332	99	133	50[5]	---	271
7/13	256	76	116	---	---	360
7/16[6]	297	83	---	---	---	404
7/16[7]	310	81	101	89	---	400
7/18	264	80	118	51[5]	---	387
7/20	---	---	127	71	---	389
7/23	---	---	---	---	---	350
7/25	---	---	123	---	---	225
8/13	53	23	22	10	76	---

[1] One unit equals 35 fathoms.
[2] One unit equals 150 fathoms.
[3] Total observed not necessarily total fished.
[4] Harriet Point to Chinitna Bay.
[5] East side only.
[6] AM low tide.
[7] PM high tide.

district from 1967 to 1973. The 1973 data showed the highest percentage of 5 year old sockeye (83.3%) and the lowest percentage of 4 year old sockeye (5.6%) recorded in the commercial catch since 1967.

(2) River systems - Scale samples have been taken from sockeye salmon entering the Kenai and Kasilof Rivers since 1966. A comparison of 1973 Kenai River data with other years shows a higher percentage of 5 year sockeye (76.6%) and a lower percentage of 4 year sockeye (6.0%) than has previously been recorded. (Appendix Table 19)

The data from the Kasilof River also showed a high percentage of 5 year sockeye (76%) when compared with previous years. (Appendix Table 20) Detailed information on the sonar operations and on commercial and river catch sampling occurs in the 1973 Cook Inlet Sockeye Forecast and Optimum Escapement report. (Davis et al.)

Test Fishing and Beach Survey: Test fishing operations were limited to only the Kenai and Kasilof Rivers during 1973 and no attempt was made to test fish during closed commercial periods in the Inlet. The beach survey was conducted in the same manner as previous years from Ninilchik to the Kenai River mouth. The results of these two operations will be summarized in the 1974 Upper Cook Inlet Annual Management Report.

Appendix
Table 1. Cook Inlet Commercial, Gear and Vessel licenses by year, 1968--1973.

Code	Gear Type		1968		1969		1970		1971		1972		1973	
01	Hand Purse Seine	R	85		72		86		80		71		78	
		N	6	(91)[1/]	3	(75)	3	(89)	1	(81)	1	(72)	1	(79)
02	Beach Seine	R	4		19		18		17		13		12	
03	Drift Gill Net	R	407		479		537		519		419		516	
		N	204	(611)	208	(687)	220	(757)	191	(710)	152	(571)	146	(662)
04	Set Gill Net	R	638		686		707		693		672		732	
		N	43	(681)	42	(728)	65	(772)	38	(731)	35	(707)	43	(775)
05	Troll	R	10		21		23		40		17		30	
		N	1	(11)	2	(23)	2	(25)	1	(41)	1	(18)	1	(31)
06	Longline	R	66		129		231		243		228		412	
			2	(68)	5	(134)	16	(247)	15	(258)	10	(238)	12	(424)
07	Otter Trawl	R	3	(3)	3	(3)	4	(4)	7	(7)	8	(8)	6	(6)
18	Clam Diggers	R	13		20		19		34		60		100	
		N		(13)	1	(21)		(19)		(34)	16	(76)	14	(114)
09	Shellfish Pots	R	43		67		84		121		98		178	
		N	7	(50)	5	(72)	2	(86)	3	(124)	4	(102)	8	(186)
11	Herring Seine	R	1	(1)	2	(2)	3	(3)		(3)		(4)	1	(1)
17	Beam Trawls	R					1	(1)			4	(4)	3	(3)
19	Scallop Dredge	R			2		1		5		1		4	
		N			6	(8)		(1)		(5)	1	(2)		(4)
	Vessel, Dory	R	954		986		1,038		1,122		1,089		1,188	
		N	230	(1,184)	236	(1,222)	264	(1,302)	223	(1,345)	183	(1,272)	181	(1,369)
	Commercial	R	1,675		1,750		2,164		2,090		2,111		2,379	
		N	615	(2,290)	597	(2,347)	667	(2,831)	484	(2,574)	483	(2,594)	481	(2,860)

1/ ( ) Parentheses indicates total of resident and nonresident licenses for each type of license.

Appendix

Table 2. Cook Inlet salmon gear registered vs salmon gear fished.[1/]

	1966	1967	1968	1969	1970	1971	1972	1973
Drift Nets Registered	504	536	611	687	757	710	571	608
Drift Nets Fished	489	521	599	608	625	463	457	460
Difference	15	15	12	79	132	247	114	148
Percent	3.0	2.8	2.0	11.5	17.4	34.8	19.9	24.3
Set Nets Registered	628	604	681	728	772	731	707	803
Set Nets Fished	616	491	632	462	522	436	495	485
Difference	12	113	49	266	250	295	212	318
Percent	1.9	18.7	7.2	36.5	32.4	40.4	29.9	39.6
Hand Purse Seines Registered	77	58	91	75	89	81	72	104
Hand Purse Seines Fished	75	54	88	58	80	49	51	48
Difference	2	4	3	17	9	32	21	56
Percent	2.6	6.9	3.3	22.7	10.1	39.5	29.1	46.1
Troll Registered	12	13	11	23	25	41	18	44
Troll Fished	5	3	0	0	8	4	3	4
Difference	7	10	11	23	17	37	15	40
Percent	58.3	76.9	100	100	68.0	90.2	83.3	90.9

[1/] Registered gear taken from Homer office statistics. Gear fished taken from IBM statistical runs.

Appendix

Table 3. Cook Inlet, per cent of salmon catch, by gear, 1960-1973.

Year	Percent Seine	Percent Drift	Percent Set Net
1960	17	26	57
1961	18	50	32
1962	30	25	45
1963	19	46	35
1964	19	35	46
1965	8	70	22
1966	11	35	54
1967	19	50	31
1968	12	47	41
1969	18	50	32
1970	24	46	30
1971	32	44	24
1972	5	50	45
1973	18	50	32
Average	18	44	38

Appendix

Table 4. Cook Inlet total salmon catch, by species, 1954-1973.

Year	Kings	Sockeyes	Cohos	Pinks	Chums	Total
1954[1/]	65,325	1,246,672	336,685	2,460,051	775,659	4,884,392
1955	46,499	1,064,128	180,452	1,286,008	317,053	2,894,140
1956	65,310	1,295,095	207,534	1,803,295	870,269	4,241,503
1957	42,767	670,629	127,199	306,841	1,207,920	2,355,356
1958	22,847	496,842	241,561	2,598,314	596,179	3,955,743
1959	32,783	634,313	112,664	137,255	411,157	1,328,172
1960[2/]	27,539	948,040	314,153	2,023,252	766,079	4,089,063
1961	19,778	1,185,079	119,297	337,394	405,221	2,066,869
1962	20,270	1,172,859	358,051	4,960,030	1,149,841	7,661,051
1963	17,632	958,101	203,876	234,052	525,537	1,939,198
1964	4,622	990,709	462,114	4,287,378	1,402,419	7,147,242
1965	9,751	1,426,352	154,363	139,561	344,052	2,074,079
1966	8,586	1,867,372	295,042	2,585,616	661,883	5,418,499
1967	8,035	1,409,107	180,455	407,717	382,282	2,387,596
1968	4,600	1,200,188	473,645	2,862,939	1,183,037	5,724,359
1969	12,462	815,050	101,575	235,866	331,058	1,496,011
1970	8,054	750,111	276,770	1,352,389	999,005	3,386,329
1971	19,838	658,537	105,197	428,495	475,631	1,687,698
1972	16,174	937,721	83,167	657,243	705,691	2,399,996
1973	5,339	699,234	106,521	633,587	783,086	2,227,767
Total	458,211	20,426,139	4,440,421	29,737,283	14,293,059	69,365,023
20 year average	22,910	1,021,306	222,021	1,486,864	714,652	3,467,753
Percent	.67	29.45	6.40	42.87	20.61	100.00

[1/] 1954-1959 data - Fish and Wildlife Service Statistical Digest 50.

[2/] 1960-1973 data - Alaska Department of Fish and Game IBM Salmon Report.

Appendix

Table 5 . Salmon catch, by species, Northern District, 1954-1973.

Year	Kings	Sockeyes	Cohos	Pinks	Chums	Total
1954	22,585	120,508	139,464	347,040	84,571	714,168
1955	20,522	52,927	46,365	3,226	40,321	163,361
1956	18,457	114,612	80,322	398,851	169,545	781,787
1957	21,422	90,431	44,416	1,678	101,454	259,401
1958	9,308	69,222	100,813	408,043	92,227	679,613
1959	13,222	134,930	41,230	2,348	50,699	242,429
1960	8,218	148,247	144,377	442,185	117,739	860,766
1961	7,755	77,374	40,975	10,765	61,103	197,972
1962	9,778	130,934	172,562	279,599	143,757	736,630
1963	7,345	109,463	63,540	8,940	43,694	232,982
1964	168	160,264	167,928	586,386	126,958	1,041,704
1965	300	31,412	21,752	4,848	16,775	75,087
1966	404	131,080	80,550	371,960	35,598	619,592
1967	184	118,065	43,854	8,460	38,384	208,947
1968	471	140,575	156,648	534,839	58,454	890,987
1969	2,904	38,065	20,425	7,620	11,836	80,850
1970	1,458	66,460	82,735	174,207	22,422	347,282
1971	9,598	40,533	22,094	8,423	16,603	97,251
1972	4,912	85,737	19,346	90,830	19,780	220,605
1973	170	45,614	23,951	137,250	30,851	237,836
Total	159,181	1,906,453	1,513,347	3,827,498	1,282,771	8,689,250
20 year average	7,959	95,322	75,667	191,374	64,138	434,460
Percent	1.83	21.94	17.42	44.05	14.76	100.00

Appendix
Table 6. Salmon catch, by species, Central District, 1954-1973.

Year	Kings	Sockeyes	Cohos	Pinks	Chums	Total
1954	41,195	1,086,538	182,061	1,842,267	425,497	3,577,558
1955	25,404	974,601	124,412	98,454	208,022	1,430,893
1956	46,518	1,144,177	117,867	1,196,524	612,506	3,117,592
1957	20,831	553,281	81,018	19,550	900,016	1,574,696
1958	13,419	408,170	138,952	1,240,505	379,470	2,180,516
1959	19,426	471,966	61,619	10,506	239,134	802,651
1960	19,294	785,292	167,125	981,464	542,258	2,495,434
1961	11,982	1,084,929	76,803	23,252	288,525	1,485,491
1962	10,432	1,016,639	177,762	2,432,090	864,177	4,501,100
1963	10,191	833,517	133,600	21,496	343,333	1,342,137
1964	4,363	809,791	285,713	2,645,575	952,128	4,697,570
1965	9,441	1,380,775	131,717	19,049	299,538	1,840,520
1966	8,121	1,721,369	209,353	1,634,416	497,223	4,070,482
1967	7,675	1,261,997	133,875	23,769	258,453	1,685,769
1968	4,065	964,321	312,112	1,742,154	1,049,449	4,072,101
1969	9,494	654,189	80,527	25,802	258,019	1,028,031
1970	6,489	662,574	189,175	603,319	753,173	2,214,730
1971	10,167	595,770	78,542	27,201	310,426	1,022,106
1972	11,174	794,087	61,587	537,750	610,368	2,014,966
1973	5,024	624,411	80,469	188,934	636,722	1,535,560
Total	294,705	17,828,394	2,824,289	15,314,078	10,428,437	46,689,903
20 year average	14,735	891,419	141,214	765,703	521,421	2,334,492
Percent	0.6	38.2	6.1	32.8	22.3	100

Appendix Table 7 .
Cook Inlet red salmon catch in thousands, by day, north of Anchor Point, 1966-1973.[1/2/]

Date	1966	1967	1968	1969	1970	1971	1972	1973
June 17					1			
18				7		4		
19					2		5 [4/]	
20			5	6				
21						1		
22		8			2			
23	9			7			4	
24			8		2			
25				7		2		2
26		6			5		4	
27	17		12	7				
28						3		
29		16			7			5
30	38			19			9	
July 1			31		18			
2				26		8		13
3		32			28		16	
4	49		64	31				
5						23	9 [5/]	
6		100			52			44
7	74			50			47	
8			115		7 [6/]			
9				83		53		77
10		118			110		75	
11	164		194	107				
12						25 [7/]		
13		200			47			161
14	487			104			112	
15			218		64			
16								116 [3/]
17		296			90		177	
18	406		194	104				84 [3/]
19								
20	218	363			163			51
21			24	65		369	219	
22	191		100		83			
23								54
24		187	72		5 [6/]		93	
25	65			56				24
26	34		45				43	
27	34	7			19			12
28	18						46	
29	13				11			
30	8							12
31	6	23	9		4	100	8	

Appendix Table 7 continued:

Cook Inlet red salmon catch in thousands,
by day, north of Anchor Point, 1966-1973.

Date	1966	1967	1968	1969	1970	1971	1972	1973
Aug. 1	3			6				7
2	3	15	6				4	
3	2				3	23		3
4	2	4		3			2	
5	1		6		1			
6	1					2		2
7	1	3			2		1	
8	1							1
9	1			1		.1	1	
10	1				1			.5

1/ Gill net districts only.
2/ Fishing Time: 1966-1968, 24-hour periods; 1969, 12-hour periods; 1970, 12-hour periods prior to July 15; 16-hour periods from July 15 on; 1971-1973, 12-hour periods.
3/ 6-hour periods.
4/ Northern closed.
5/ Northern and part of Central closed
6/ Central District closed
7/ Partly closed

Appendix Table 8 .
Cook Inlet aircraft charter - by district, 1966 - 1973.

Year	Southern & Outer		Kamishak		Central		Northern		Cook Inlet Total
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount
1966	$2,011.	18.4	$1,019.	9.3	$2,630.	24.3	$5,286.	48.3	$10,946.
1967	1,178.	14.2	537.	6.4	1,988.	23.8	4,608.	55.4	8,311.
1968	1,638.	15.3	296.	2.8	2,999.	27.1	5,804.	54.6	10,737.
1969	2,145.	18.9	945.	8.3	1,775.	15.7	6,494.	57.2	11,359.
1970	3,424.	36.3	1,556.	16.5	2,286.	24.2	2,173.	23.0	9,439.
1971	5,655.	53.3	1,215.	11.5	2,488.	23.4	1,254.	11.8	10,612.
1972	4,273.	36.0	1,911.	16.1	3,742.	31.6	1,927.	16.3	11,853.
1973	4,122.	44.6	2,222.	24.0	2,187.	23.6	723.	7.8	9,254.
TOTAL	24,446.	29.6	9,701.	11.7	20,095.	24.4	28,269.	34.3	82,511.

Appendix

Table 9. Fish Creek Salmon escapement counts 1936-1973.

Year	Method of Enumeration	Dates of Operation	Count through July 31			Count for entire season		
			Sockeye	Coho	Pink	Sockeye	Coho	Pink
1936	Weir	7/15-8/11	183,722			203,039		
1937	Weir	7/21-8/9	25,031			50,617	489	
1938	Weir	7/10-8/8	115,531	14,549		182,463	19,417	
1939	Weir	7/11-8/12	57,220		332	116,588	2,764	332
1940	Weir	7/4-8/12	293,880			306,982	16,546	
1941	Weir	7/4-8/9	39,032	6,886		55,077	9,720	
1942-1945	No counts made [1/]							
1946	Est. ground count					57,000		
1947	Est. ground count					150,000		
1948	Est. ground count					150,000		
1949	Weir	7/9-8/17	61,219	105		68,240	1,642	
1950	Weir	7/9-8/17	9,873	189		29,659	1,042	699
1951	Weir	7/4-8/16	27,278	861		34,704	1,953	
1952	Weir	7/12-8/9	91,125	265		92,724	277	
1953	Weir	7/11-8/5	44,385	50		54,343	71	
1954	Weir	7/13-8/9	17,483	252		20,904	1,057	
1955	Weir	7/8-8/8	30,112	3,984	8	32,724	4,417	8
1956	Weir	7/8-7/31	32,663	22	32			
1957	Weir	7/12-8/25	12,443			15,630	346	

Appendix
Table 9 continued:

Fish Creek salmon escapement counts 1936 - 1973.

Year	Method of Enumeration	Dates of Operation	Count through July 31			Count for entire season		
			Sockeye	Coho	Pink	Sockeye	Coho	Pink
1958	Weir	7/4 - 7/28	17,573	592				
1959	Counting screen	7/10 - 8/2	77,416					
1960	Counting screen	7/4 - 7/31	80,000					
1961	Counting screen	7/4 - 7/31	40,000					
1962	Counting screen	7/4 - 7/31	60,000					
1963	Counting screen	7/4 - 8/1	119,024	1,814				
1964	Counting screen	7/4 - 7/31	65,000					
1965	Counting screen	7/4 - 8/8	11,584	136	112	16,544	792	584
1966	Counting screen	7/5 - 7/31	41,312		10,760			
1967	Counting screen	7/3 - 7/31	22,624	984	168			
1968	Counting screen	7/1 - 7/31	19,616	2,088	48,128			
1969	Weir	7/4 - 9/2	6,243	11		12,456	4,253	
1970	Weir	7/4 - 8/8	19,881	574	2,704	25,000[2/]	1,048	3,940
1971	Weir	7/3 - 8/7	18,961	150		32,000[3/]	583	
1972	Weir	7/2 - 9/8	3,371	64	13	6,981	709	57
1973	Weir	7/1 - 9/6	1,059	71	0	2,705	210	6

1/ Rating of poor, fair, or good given only.
2/ Includes estimated 3,500 sockeye salmon still behind weir when it washed out 8/8/70.
3/ Includes estimated 500 sockeye salmon still behind weir when it was removed 8/7/71.

Appendix
Table 10. Russian River sockeye salmon escapements, 1960 - 1973.

Year	Early run escapement (thru 7/15)	Late run (Jul. 16 on)	Total escapement
1960[1/]	9,115	34,839	43,954
1961	7,791	18,669	26,460
1962		55,653	55,653
1963	15,311	51,100	66,411
1964	12,782	46,921	59,703
1965	21,776	21,459	43,235
1966	16,915	34,521	51,436
1967	13,706	49,458	63,164
1968[2/]	9,204	48,862	58,066
1969[3/]	5,000	30,020	35,020
1970	5,451	28,200	33,651
1971	2,654	54,429	57,083
1972	9,273	78,842	88,115
1973	13,120	24,974	38,094

1/ 1960-67 escapement counts are based on tower counts for 15 minutes per hour for 12 hours then skipping 16 hours and counting again 15 minutes per hour for 12 hours and then expanding by 9.33.

2/ 1968 early escapement based on 15 minute hour counts for 24 hours and then expanding by 4. Late escapement based on procedures followed in 1960-67.

3/ 1969-73 weir counts except for early run in 1969 which was spawning ground count.

Appendix

Table 11. Sonar estimates, peak survey count totals, and available weir counts of sockeye salmon in selected Cook Inlet spawning streams.

	Kenai System							
	Kenai		Russian	Hidden Cr	Kasilof		Fish Cr	Talachulitna
Year	Sonar	Index[3]	Late Run	Weir	Sonar	Index[3]	Weir	Tower
1960			34,839[1]				80,000	
1961			18,669[1]				40,000	
1962			55,653[1]				60,000	
1963			51,100[1]				119,024	
1964			46,921[1]				65,000	
1965			21,459[1]				16,544	
1966		16,055	34,521[1]			32,886	41,312	
1967		9,608	49,458[1]			21,442	22,624	
1968	113,409	7,803	48,862[1]		92,708	41,406	19,616	
1969	53,625	3,001	30,020[2]		45,588	18,400	12,456	
1970	66,418	1,979	28,200[2]		37,240	16,719	25,000	
1971	51,237[4]	15,906	54,429[2]	1,958	30,161[4]	54,645	32,000	
1972	269,679	13,066	78,842[2]	4,956	111,944	77,066	6,981	15,730
1973	368,369	15,745	24,974[2]	690	40,189	25,083	2,705	19,355

[1] Tower counts (late run, only).

[2] Weir counts (late run, only).

[3] Index counts are derived from clearwater spawning tributaries. The peak counts (dead and live) from streams are totaled.

[4] Sonar counters malfunctioned during 1971.

Appendix

Table 12. Peak sockeye salmon counts on Kasilof River drainage for years 1972 and 1973.

Stream	1973 Date	1973 Live	1973 Dead	1973 Total	1972 Date	1972 Live	1972 Dead	1972 Total
Glacier Flat Creek	8/23	8,600	2,023	10,623	8/27	28,525	10,523	39,048
Moose Creek	8/11	2,875	410	3,285	8/14	13,821	667	14,488
Nikolai Creek	8/10	288	2	290	8/7	13,513	155	13,668
Seepage Creek	8/12	1,056	8	1,064	8/21	2,888	359	3,247
Clear Creek	8/15	144	22	166	9/1	178 est.	20 est.	198
Crystal Creek	8/22	193	5	198	8/26	513	303	816
Pipe Creek	8/20	20		20	8/23	129	61	190
TOTALS		18,613	6,496	25,109		84,713	14,678	99,391

Appendix Table 13.
Aerial stream surveys - Chinitna - South Central District
1965 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/30/65	---	---	33	Chums	Clear	Fitz Creek
7/30/65	---	---	0	---	---	Marsh Creek
8/7/65	---	---	270	Chums	Clear	Fitz Creek
8/7/65	---	---	225	Chums	Clear	Rt. hand fork (Marsh Creek)
8/7/65	---	---	585	Chums	Clear	Left hand fork (Marsh Creek)
8/ /66	20,000	Chums	---	---	---	At head end of bay.
8/2/68	---	---	11,000	Chums	---	Most in intertidal stream.
7/22/69	0	---	0	---	---	Visibility good.
8/11/69	---	---	2,500	Chums	---	Head end (Marsh Creek)
8/3/70	0	---	0	---	---	----
8/12/70	800	Chums	Finners	---	---	Finners at headstream, too turbid to estimate
7/15/71	0	---	0	---	Clear/calm	2 black bears
8/9/71	---	---	250	Chums	---	---
8/16/71	---	---	5,000	Chums	Overcast/calm	---
9/3/71	---	---	17,000	Chums	Overcast/calm	---
8/7/72	---	---	1,000	Chums	---	---
8/17/72	----	---	550	Chums	Clear/wind	Another 250 chums in rt. stream
			1,700	Chums	---	Middle section.
			100	Chums	---	Right side bay, s. of glacial r
			50	Reds	---	---
8/24/72			5,900	Chums	---	---
8/16/73	---	---	8,450	Chums	Clear/calm	Clear creek/1 mile stream
	---	---	410	Chums	Clear/calm	Chinitna

Appendix Table 14

Kenai River Sonar Counts

1968--1973 1/

	1968	cum	1969	cum	1970	cum	1972	cum	1973	cum
June 15	503	503	999	999	552	552	466	466		
16	342	845	2,251	3,250	758	1,310	804	1,270		
17	342	1,187	912	4,162	1,101	2,411	521	1,791	2,890	2,890
18	181	1,368	1,121	5,283	1,185	3,596	335	2,126	1,489	4,379
19	271	1,639	1,152	6,435	421	4,017	512	2,638	784	5,163
20	199	1,838	4,129	10,564	392	4,409	289	2,927	912	6,075
21	126	1,964	6,580	17,144	312	4,721	397	3,324	791	6,866
22	147	2,111	3,987	21,131	519	5,240	734	4,058	1,008	7,874
23	589	2,700	2,021	23,152	352	5,592	816	4,874	822	8,696
24	132	2,832	1,041	24,193	331	5,923	980	5,854	541	9,237
25	1,172	4,004	2,269	26,462	375	6,298	367	6,221	475	9,712
26	134	4,138	1,251	27,713	463	6,761	414	6,635	583	10,295
27	193	4,331	2,238	29,951	664	7,425	243	6,878	144	10,439
28	224	4,555	2,066	32,017	467	7,892	211	7,089	154	10,593
29	131	4,686	1,766	33,783	517	8,409	593	7,682	77	10,670
30	187	4,873	1,687	35,470	360	8,769	751	8,433	61	10,731
July 1	488	5,361	1,901	37,371	164	8,933	410	8,843	51	10,782
2	238	5,599	1,818	39,189	251	9,184	925	9,768	93	10,875
3	379	5,978	1,934	41,123	304	9,488	674	10,442	145	11,020
4	882	6,860	1,101	42,224	290	9,778	655	11,097	265	11,285
5	1,067	7,927	904	43,128	349	10,127	320	11,417	592	11,877
6	663	8,590	1,021	44,149	315	10,442	360	11,777	2,992	14,869
7	1,338	9,928	766	44,915	470	10,912	544	12,321	1,492	16,361
8	1,772	11,700	894	45,809	774	11,686	498	12,819	1,056	17,417
9	304	12,004	2,384	48,193	790	12,476	1,623	14,442	2,935	20,352
10	177	12,181	825	49,018	471	12,947	993	15,435	6,991	27,343
11	399	12,580	843	49,861	946	13,893	1,634	17,069	4,163	31,506
12	342	12,922	967	50,828	1,194	15,087	675	17,744	8,124	39,630
13	1,248	14,170	750	51,578	3,608	18,695	1,795	19,539	18,293	57,923

1/ Sonar counts malfunctioned during 1971.

Appendix Table 14 continued:

Kenai River Sonar Counts cont.

1968--1973

	1968	cum	1969	cum	1970	cum	1972	cum	1973	cum
July 14	1,585	15,755	626	52,204	3,319	22,014	3,459	22,998	12,057	69,980
15	6,558	22,313	832	53,036	2,342	24,356	1,071	24,069	10,175	80,155
16	6,399	28,712	731	53,767	885	25,241	3,746	27,815	10,702	90,857
17	5,331	34,043	667	54,434	549	25,790	634	28,449	8,992	99,849
18	8,524	42,567	527	54,961	1,357	27,147	388	28,837	9,518	109,367
19	5,428	47,995	1,588	56,549	998	28,145	584	29,421	12,000	121,367
20	8,543	56,538	365	56,914	1,150	29,295	7,834	37,255	22,490	143,857
21	2,721	59,259	443	57,357	1,093	30,388	20,957	58,212	25,785	169,642
22	6,114	65,373	397	57,754	958	31,346	26,196	84,408	26,172	195,814
23	7,265	72,638	628	58,382	2,777	34,123	27,742	112,150	39,066	234,880
24	5,560	78,198	756	59,138	2,695	36,818	35,382	147,532	35,589	270,469
25	4,768	82,966	1,524	60,662	3,513	40,331	26,734	174,266	25,491	295,960
26	2,992	85,958	661	61,323	5,304	45,635	26,585	200,851	21,517	317,477
27	4,518	90,476	567	61,890	3,973	49,608	24,478	225,329	14,618	332,095
28	2,115	92,591	626	62,516	3,723	53,331	21,063	246,932	13,127	345,222
29	4,727	97,318	666	63,182	3,193	56,524	18,273	264,665	8,313	353,535
30	1,868	99,186	585	63,767	2,956	59,480	8,746	273,411	8,799	362,334
31	3,064	102,250	556	64,323	3,412	62,892	3,925	277,336	3,570	365,904
Aug. 1	1,971	104,221	528	64,851	3,132	66,024	6,357	283,693	3,002	368,906
2	1,596	105,817	665	65,516	3,449	69,473	6,190	289,883	2,573	371,479
3	3,739	109,556	858	66,374	3,091	72,564	4,207	294,090	3,173	374,650
4	4,934	114,490	884	67,258	3,511	76,075	17,472	311,562	2,262	376,912
5	5,169	119,659	716	67,974	4,547	80,662	12,743	324,305	1,275	378,187
6	7,765	127,424	442	68,416	2,748	83,370	8,186	332,491	845	379,032
7	133	127,557	269	68,685	1,393	84,763	5,920	338,411	1,316	380,348
8			157	68,842	949	85,712	5,998	344,409	518	380,866

1/ Sonar counters malfunctioned during 1971.

Appendix Table 15

Kenai River Sockeye Sonar Counts

1968--1973 1/

	1968	cum	1969	cum	1970	cum	1972	cum	1973	cum
June 15	423	423	739	739	465	465	452	452		
16	288	711	1,666	2,405	638	1,103	779	1,231		
17	288	999	675	3,080	928	2,031	505	1,736	2,812	2,812
18	152	1,151	830	3,910	999	3,030	325	2,061	1,449	4,261
19	228	1,379	852	4,762	355	3,385	496	2,557	763	5,024
20	167	1,546	3,055	7,817	331	3,716	280	2,837	887	5,911
21	106	1,652	5,026	12,843	263	3,979	385	3,222	770	6,681
22	124	1,776	2,950	15,793	438	4,417	711	3,933	981	7,662
23	495	2,271	1,496	17,289	297	4,714	791	4,724	800	8,462
24	111	2,382	770	18,059	279	4,993	950	5,674	526	8,988
25	986	3,368	1,679	19,738	316	5,309	356	6,030	462	9,450
26	113	3,481	926	20,664	390	5,699	401	6,431	567	10,017
27	162	3,643	1,656	22,320	560	6,259	236	6,667	140	10,157
28	188	3,831	1,529	23,849	394	6,653	205	6,872	150	10,307
29	110	3,941	1,307	25,156	436	7,089	575	7,447	75	10,382
30	157	4,098	1,248	26,404	304	7,393	728	8,175	59	10,441
July 1	410	4,508	1,407	27,811	138	7,531	397	8,572	50	10,491
2	200	4,708	1,345	29,156	212	7,743	896	9,468	91	10,582
3	319	5,027	1,431	30,587	256	7,999	653	10,121	141	10,723
4	742	5,769	815	31,402	245	8,244	635	10,756	258	10,981
5	897	6,666	669	32,071	294	8,538	310	11,066	576	11,557
6	558	7,224	756	32,827	266	8,804	349	11,415	2,911	14,468
7	1,260	8,484	567	33,394	396	9,200	527	11,942	1,452	15,920
8	1,669	10,153	662	34,056	653	9,853	483	12,435	1,028	16,948
9	286	10,439	1,764	35,820	666	10,519	1,573	13,998	2,856	19,804
10	167	10,606	610	36,430	397	10,916	962	14,960	6,802	26,606
11	376	10,982	624	37,054	798	11,714	1,583	16,543	4,051	30,657
12	322	11,304	716	37,770	1,007	12,721	654	17,197	7,905	38,562
13	1,176	12,480	696	38,466	3,042	15,763	1,739	18,936	17,800	56,362

1/ Sonar counters malfunctioned during 1971.

Appendix Table 15 continued:

Kenai River Sockeye Sonar Counts cont.

1968--1973 [1/]

		1968	cum	1969	cum	1970	cum	1972	cum	1973	cum
July	14	1,493	13,973	581	39,047	2,798	18,561	3,352	22,288	11,732	68,094
	15	6,178	20,151	772	39,819	1,974	20,535	1,038	23,326	9,809	77,903
	16	6,028	26,179	678	40,497	746	21,281	3,630	26,956	10,317	88,220
	17	5,022	31,201	619	41,116	438	21,719	614	27,570	8,668	96,888
	18	7,921	39,122	489	41,605	1,082	22,801	376	27,946	9,175	106,063
	19	5,044	44,166	1,474	43,079	795	23,596	566	28,512	11,568	117,631
	20	7,939	52,105	339	43,418	917	24,513	7,591	36,103	21,680	139,311
	21	2,528	54,633	411	43,829	871	25,384	20,307	56,410	24,831	164,142
	22	5,873	60,506	368	44,197	764	26,418	25,515	81,925	25,204	189,346
	23	6,980	67,486	583	44,780	2,213	28,361	27,021	108,946	37,946	226,967
	24	4,576	72,062	702	45,482	2,148	30,509	34,957	143,903	35,376	262,343
	25	3,924	75,986	1,414	46,896	2,800	33,309	25,905	169,808	25,338	287,681
	26	1,453	77,439	657	47,553	4,227	37,536	25,761	195,569	20,829	308,510
	27	2,193	79,632	564	48,117	3,167	40,703	23,719	219,288	14,150	322,660
	28	1,027	80,659	622	48,739	2,967	43,670	20,410	239,698	12,707	335,367
	29	2,295	82,954	662	49,401	2,545	46,215	17,707	257,405	7,698	343,065
	30	907	83,861	581	49,982	2,356	48,571	8,475	265,880	8,148	351,213
	31	778	84,639	399	50,381	2,719	51,290	3,803	269,683	3,306	354,519
Aug.	1	500	85,139	379	50,760	2,496	53,786			2,780	357,299
	2	405	85,544	477	51,237	2,749	56,535			2,383	359,682
	3	949	86,493	616	51,853	2,464	58,999			2,936	362,618
	4	411	86,904	635	52,488	2,798	61,797			2,095	364,713
	5	431	87,335	514	53,002	1,455	63,252			1,181	365,894
	6	1,397	88,732	317	53,319	879	64,135			783	366,677
	7	23	88,755	193	53,512	446	64,577			1,219	367,896
	8			113	53,625	304	64,881			480	368,376

1/ Sonar counters malfunctioned during 1971.

Appendix Table 16

Kasilof River Sonar Counts
1968--1973 1/

	1968	cum	1969	cum	1970	cum	1972	cum	1973	cum
June 15	650	650	255	255	1,290	1,290	22	22		
16	53	703	26	281	38	1,328	118	140		
17	57	760	1,457	1,738	85	1,413	28	168		
18	53	813	79	1,817	313	1,726	23	191		
19	68	881	75	1,892	52	1,778	23	214	15	15
20	226	1,107	207	2,099	1,532	3,310	33	247	40	55
21	240	1,347	182	2,281	60	3,370	9	256	59	114
22	65	1,412	230	2,511	66	3,436	42	298	70	184
23	64	1,476	190	2,701	65	3,501	31	329	89	273
24	100	1,576	1,517	4,218	86	3,587	39	368	88	361
25	206	1,782	7,472	11,690	175	3,762	20	388	46	407
26	139	1,921	796	12,486	188	3,950	30	418	116	523
27	204	2,125	223	12,709	322	4,272	84	502	79	602
28	0	2,125	407	13,116	397	4,669	118	620	88	690
29	0	2,125	882	13,998	619	5,288	52	672	352	1,042
30	349	2,474	1,387	15,385	707	5,995	194	866	311	1,353
July 1	666	3,140	1,912	17,297	635	6,630	299	1,165	503	1,856
2	2,161	5,301	8,210	25,507	515	7,145	318	1,483	392	2,248
3	2,298	7,599	631	26,138	992	8,137	242	1,725	1,092	3,340
4	3,039	10,638	652	26,790	462	8,599	185	1,910	916	4,256
5	4,425	15,063	812	27,602	645	9,244	343	2,253	980	5,286
6	6,571	21,634	1,196	28,798	1,084	10,328	236	2,489	877	6,113
7	2,765	24,399	765	29,563	1,792	12,120	442	2,931	830	6,943
8	4,624	29,023	945	30,508	2,741	14,861	528	3,459	854	7,797
9	0	29,023	1,247	31,755	1,741	16,602	1,084	4,543	950	8,747
10	5,937	34,960	1,247	33,002	1,538	18,140	1,279	5,822	1,522	10,269
11	8,952	43,912	858	33,860	1,248	19,388	1,077	6,899	3,548	13,817
12	5,967	49,879	652	34,512	1,321	20,709	1,376	8,275	1,699	15,516
13	2,926	52,805	654	35,166	1,670	22,379	1,473	9,748	2,120	17,636

1/ Sonar counters malfunctioned in 1971.

Appendix Table 16 continued:

Kasilof River Sonar Counts
1968--1973 1/

	1968	cum	1969	cum	1970	cum	1972	cum	1973	cum
July 14	3,851	56,656	829	35,995	1,756	24,135	997	10,745	1,632	19,268
15	3,574	60,230	528	36,523	1,535	25,760	822	11,567	2,023	21,291
16	3,104	63,334	459	36,982	1,652	27,322	342	11,909	1,346	22,637
17	3,248	66,582	714	37,696	1,164	28,486	857	12,766	2,353	24,990
18	3,495	70,077	537	38,233	796	29,282	787	13,553	1,162	26,152
19	3,282	73,359	652	38,885	761	30,043	556	14,109	989	27,141
20	2,181	75,540	661	39,546	843	30,886	3,539	17,648	3,213	30,354
21	3,340	78,880	455	40,001	575	31,461	5,592	23,240	984	31,388
22	2,649	81,529	653	40,654	338	31,799	23,303	46,543	1,205	32,543
23	2,157	83,686	532	41,186	635	32,434	25,606	72,149	2,099	34,642
24	2,506	86,192	733	41,919	862	33,926	28,372	100,521	1,604	36,246
25	1,932	88,124	1,539	43,458	1,350	34,646	1,816	102,337	1,254	37,500
26	2,086	90,210	1,088	44,546	931	35,577	1,932	104,269	852	38,352
27	662	90,872	377	44,923	810	36,387	1,867	106,136	906	39,258
28	741	91,613	290	45,213	472	36,859	1,666	107,802	487	39,745
29	635	92,248	336	45,549	915	37,774	1,302	109,104	386	40,131
30	460	92,708	303	45,852	469	38,243	1,175	110,279	291	40,422
31			291	46,143	374	38,617	895	111,174	446	40,868
Aug. 1			245	46,388	262	38,879	1,315	112,489	199	41,067
2			284	46,672	446	39,325	1,013	113,502	293	41,360
3			222	46,894	516	39,841			331	41,691
4			482	47,376	492	40,333			266	41,957
5			364	47,740	115	40,448				
6			241	47,981						
7			363	48,344						
8			115	48,459						

1/ Sonar counters malfunctioned in 1971.

Appendix Table 17

Kasilof River Sockeye Sonar Counts
1968--1973 1/

	1968	cum	1969	cum	1970	cum	1972	cum	1973	cum
June 15	650	650	248	248	1,214	1,214	22	22		
16	53	703	25	273	36	1,250	116	138		
17	57	760	1,418	1,691	80	1,330	28	166		
18	53	813	77	1,768	295	1,625	23	189		
19	68	881	73	1,841	49	1,674	23	212	14	14
20	226	1,107	201	2,042	1,442	3,116	32	244	38	52
21	240	1,347	177	2,219	56	3,172	9	253	56	108
22	65	1,412	224	2,443	62	3,234	41	294	67	175
23	64	1,476	185	2,628	61	3,295	30	324	85	260
24	100	1,576	1,476	4,104	81	3,376	38	362	84	344
25	206	1,782	7,270	11,374	165	3,541	20	382	44	388
26	139	1,921	775	12,149	177	3,718	29	411	111	499
27	204	2,125	217	12,366	303	4,021	82	493	75	574
28	0	2,125	396	12,762	374	4,395	116	609	84	658
29	0	2,125	858	13,620	582	4,977	51	660	336	994
30	349	2,474	1,350	14,970	665	5,642	190	850	296	1,290
July 1	666	3,140	1,860	16,830	598	6,240	293	1,143	479	1,769
2	2,161	5,301	7,988	24,818	485	6,725	312	1,455	374	2,143
3	2,298	7,599	614	25,432	933	7,658	237	1,692	1,041	3,184
4	3,039	10,638	634	26,066	435	8,093	181	1,873	873	4,057
5	4,425	15,063	790	26,856	607	8,700	336	2,209	934	4,991
6	6,571	21,634	1,164	28,020	1,020	9,720	232	2,441	836	5,827
7	2,765	24,399	707	28,727	1,686	11,406	434	2,875	791	6,618
8	4,624	29,023	873	29,600	2,703	14,107	518	3,393	814	7,432
9	0	29,023	1,152	30,752	1,717	15,826	1,063	4,456	905	8,337
10	5,937	34,960	1,152	31,904	1,517	17,343	1,255	5,711	1,451	9,788
11	8,952	43,912	793	32,697	1,231	18,574	1,042	6,753	3,381	13,169
12	5,967	49,879	602	33,299	1,303	19,877	1,331	8,084	1,619	14,788
13	2,926	52,805	604	33,903	1,647	21,524	1,424	9,508	2,020	16,808

1/ Sonar counters malfunctioned during 1971.

Appendix Table 17 continued:

Kasilof River Sockeye Sonar Counts cont.
1968--1973 1/

	1968	cum	1969	cum	1970	cum	1972	cum	1973	cum
July 14	3,851	56,656	766	34,669	1,528	23,052	991	10,499	1,555	18,363
15	3,574	60,230	488	35,157	1,336	24,388	817	11,316	1,946	20,309
16	3,104	63,334	424	35,581	1,437	25,825	340	11,656	1,295	21,604
17	3,248	66,582	623	36,204	1,013	26,838	852	12,508	2,264	23,868
18	3,495	70,077	468	36,672	693	27,531	782	13,290	1,118	24,986
19	3,282	73,359	569	37,241	662	28,193	553	13,843	951	25,937
20	2,181	75,540	576	37,817	773	28,966	3,518	17,361	3,091	29,028
21	3,340	78,880	397	38,214	500	29,466	5,547	22,908	947	29,975
22	2,649	81,529	569	38,783	294	29,760	23,093	46,001	1,159	31,134
23	2,157	83,686	464	39,247	552	30,312	25,606	71,607	2,019	33,153
24	2,506	86,192	639	39,886	750	31,062	28,372	99,979	1,543	34,696
25	1,932	88,124	1,342	41,228	1,175	32,237	1,816	101,795	1,206	35,902
26	2,086	90,210	949	42,177	810	33,047	1,756	103,551	820	36,722
27	662	90,872	328	42,505	705	33,752	1,697	105,248	872	34,594
28	741	91,613	253	42,758	411	34,163	1,514	106,762	469	38,063
29	635	92,248	293	43,051	796	34,959	1,184	107,946	371	38,434
30	460	92,708	264	43,315	408	35,367	1,068	109,014	280	38,714
31			254	43,569	325	35,692	814	109,828	429	39,143
Aug. 1			214	43,783	228	35,920	1,195	111,023	191	39,334
2			248	44,031	388	36,308	921	111,944	282	39,616
3			194	44,225	449	36,757			318	39,934
4			420	44,645	428	37,185			256	40,190
5			317	44,962	100	37,285				
6			210	45,172						
7			317	45,489						
8			100	45,589						

1/ Sonar counters malfunctioned during 1971.

Appendix Table 18.
Commercial harvest brood year percentage (weighed by catch) for the years 1967 through 1973. (1967-1970 Central district only, 1971-1973 Northern and Central districts combined).

BROOD YEAR

Year of harvest	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	n
Age	7	6	5	4	3						
1967	0.8	18.7	68.8	11.5	0.2						1,580
Age		7	6	5	4	3					
1968		0.2	18.5	53.9	27.4						3,826
Age			7	6	5	4	3				
1969			0.3	16.7	68.7	14.3					2,394
Age				7	6	5	4	3			
1970				1.5	17.7	61.3	19.4	0.1			3,195
Age					7	6	5	4	3		
1971[1/]						12.8	75.3	11.9			2,061
Age						7	6	5	4	3	
1972[1/]						1.2	24.9	55.3	18.6		3,842

[1/] Includes Northern district data.

TOTAL AGE

6-year average	7	6	5	4	3
	.7	18.2	63.9	17.2	

Numbers of fish produced by brood year in commercial harvest.
TOTAL AGE

Brood year	3	4	5	6	7	Total
1960					11,300	
1961				263,500	2,200	
1962			969,400	204,400	2,000	1,175,800[1/]
1963		162,000	595,600	115,600	10,900	884,100
1964	2,800	302,800	475,400	129,000		910,000
1965		99,000	446,900	81,400	9,690	636,990
1966		141,400	478,900	204,550		824,950
1967	700	75,700	453,524	74,342		
1968		152,177	560,087			
1969	316	37,750				

[1/] Incomplete data.

Appendix Table 19.
Sockeye salmon age data by percent from escapement samples collected from the Kenai River for years 1966 through 1973.

	Age Class												
Year	3_2 1.1	4_2 1.2	5_2 1.3	6_2 1.4	4_3 2.1	5_3 2.2	6_3 2.3	7_3 2.4	5_4 3.1	6_4 3.2	7_4 3.3	8_4 3.4	n
1966	0.5	14.5	57.4	0.3	0.1	9.4	17.6	0.1		0.1			738
1967		6.0	61.5	1.7		6.6	23.1				1.1		182
1968		24.8	37.8	0.9	0.6	10.8	25.1						331
1969	0.3	8.6	36.1	1.6	2.9	36.4	13.1	0.3	0.3		0.5		382
1970	0.4	10.2	17.3	0.4	25.8	24.9	15.1	0.4	0.9	4.0		0.4	225
1971		8.3	38.7	1.3	2.9	37.5	11.3						168
1972	0.2	21.3	33.3	0.2	0.5	23.1	20.3	0.2		0.7			403
1973	0.3	4.9	68.5	0.8	1.1	8.1	16.1	0.3					632
AVE:	0.2	13.5	40.3	0.9	4.7	21.2	17.9	0.1	0.2	0.7	0.2	T	99.9%

Brood Year

Year	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Age	7	6	5	4	3							
1966	0.1	18.0	66.8	14.6	0.5							
Age		7	6	5	4	3						
1967		1.1	24.8	68.1	6.0							
Age			7	6	5	4	3					
1968				26.0	48.6	25.4						
Age				7	6	5	4	3				
1969				0.8	14.7	72.8	11.5	0.3				
Age				8	7	6	5	4	3			
1970				0.4	0.4	19.5	43.1	36.0	0.4			
Age							6	5	4	3		
1971							12.6	76.2	11.2			
Age							7	6	5	4	3	
1972							0.2	21.3	56.3	21.8	0.2	
Age								7	6	5	4	3
1973								0.2	16.9	76.6	6.0	0.3

TOTAL AGE:	7-year average	7	6	5	4	3
		0.6	19.3	62.6	17.5	0.4

Appendix Table 20.
Sockeye salmon age data from escapement samples collected from the Kasilof River for years 1966 through 1973.

Age Class

Year	3_2 1.1	4_2 1.2	5_2 1.3	6_2 1.4	4_3 2.1	5_3 2.2	6_3 2.3	7_3 2.4	7_4 3.3	n
1966		28.0	61.7			3.0	7.3			68
1967		7.9	64.9			7.9	19.3			114
1968		46.8	35.1			5.2	12.9			77
1969		14.0	39.0	0.9		30.5	15.6			339
1970	0.3	32.0	37.0	1.7		16.5	11.1	1.3		297
1971		6.5	69.3			8.5	15.7			153
1972	0.3	42.2	35.5	0.7	0.1	3.4	17.5	0.3	0.1	668
1973		19.5	57.0			19.0	4.5			
AVE.	0.1	24.6	49.9	0.4	T	11.8	13.0	0.2	T	100%

Brood Year

Year of Return	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Age	6	5	4							
1966	7.3	64.7	28.0							
Age		6	5	4						
1967		19.3	72.8	7.9						
Age			6	5	4					
1968			12.9	40.3	46.8					
Age				6	5	4				
1969				16.5	69.5	14.0				
Age				7	6	5	4	3		
1970				1.3	12.8	53.5	32.0	0.3		
Age						6	5	4		
1971						15.7	77.8	6.5		
Age						7	6	5	4	3
1972						0.4	18.3	38.8	42.2	0.3
Age							7	6	5	4
1973								4.5	76.0	19.5

TOTAL AGE:	8-year average	7	6	5	4	3
	Percent	0.2	13.4	61.7	24.6	0.1

Appendix Table 21. 1968 Cook Inlet salmon catch by stat area and gear. 1/

NORTHERN DISTRICT		KINGS	REDS	COHOS	PINKS	CHUMS	TOTALS
Set net	247	471	140,575	156,648	534,839	58,454	890,987
CENTRAL DISTRICT							
Drift	244	136	451,389	138,135	733,016	852,780	2,175,456
	245	47	113,414	27,955	140,288	147,836	429,540
	246		2,147	1,519	8,490	7,513	19,669
Total drift		183	566,950	167,609	881,794	1,008,129	2,624,665
Set net	244	3,304	317,535	80,828	785,887	1,563	1,189,117
	245	439	47,271	47,433	51,356	37,760	184,259
	246	139	32,565	16,242	23,117	1,997	74,060
Total set net		3,882	397,371	144,503	860,360	41,320	1,447,436
Seine	245		8	1,690	1,204	11,211	14,113
Central total		4,065	964,329	313,802	1,743,358	1,060,660	4,086,214
SOUTHERN DISTRICT							
Seine	241	30	2,975	3,229	141,419	3,114	150,767
Set net	241	31	15,741	1,431	12,614	1,289	31,106
Southern total		61	18,716	4,660	154,033	4,403	181,873
OUTER DISTRICT							
Seine	232		4	3	13,155	84	13,246
	241					115	115
	242	1	16	21	88,353	13,309	101,700
Outer total		1	20	24	101,508	13,508	115,061
KAMISHAK DISTRICT							
Seine	243		491	53	170,376	23,009	193,929
	248		1	48	27,877	26,452	54,378
Kamishak total			492	101	198,253	49,461	248,307
EASTERN DISTRICT							
Drift	231	2	65,750	4	5	11	65,772
Seine	231		8,734		37,374	721	46,829
	232		1,534	85	103,338	6,974	111,931
	233			1	4,085	140	4,226
Eastern total		2	76,018	90	144,802	7,846	228,758
1968 Summary by gear							
01, Seine		31	13,763	5,130	587,181	85,129	691,234
03, Drift		185	632,700	167,613	881,799	1,008,140	2,690,437
04, Set net		4,384	553,687	302,582	1,407,813	101,063	2,369,529
TOTAL CATCH		4,600	1,200,150	475,325	2,876,793	1,194,332	5,751,200

1/ Taken from 1968 IBM statistical run.

Appendix Table 22. 1969 Cook Inlet salmon catch by stat area and gear. 1/

NORTHERN DISTRICT		KINGS	REDS	COHOS	PINKS	CHUMS	TOTALS
Set net	247	2,904	38,065	20,425	7,620	11,836	80,850
CENTRAL DISTRICT							
Drift	244	240	294,754	25,021	6,423	171,674	498,112
	245	123	77,007	8,033	1,813	66,823	153,799
Total Drift		363	371,761	33,054	8,236	238,497	651,911
Set net	244	5,834	210,877	18,988	10,968	399	247,066
	245	1,768	42,691	20,370	2,744	16,651	84,224
	246	1,518	28,500	8,022	2,970	311	41,321
Total set net		9,120	282,068	47,380	16,682	17,361	372,611
Seine	245	11	360	93	884	2,161	3,509
Central total		9,494	654,189	80,527	25,802	258,019	1,028,031
SOUTHERN DISTRICT							
Seine	241	26	1,008	239	60,036	1,302	62,611
Set net	241	33	11,570	246	10,717	1,298	23,864
Southern total		59	12,578	485	70,753	2,600	86,475
OUTER DISTRICT							
Seine	232,241		92	11	51,533	5,400	57,036
KAMISHAK DISTRICT							
Seine	243,248	2	10,723	121	80,157	53,193	144,196
EASTERN DISTRICT							
Seine	231		294				294
Drift	231	3	99,109	6	1	10	99,129
Eastern total		3	99,403	6	1	10	99,423
1969 Cook Inlet Summary by gear							
01, Seine		39	12,477	464	192,610	62,056	267,646
03, Drift		366	470,870	33,060	8,237	238,507	751,040
04, Set net		12,057	331,703	68,051	35,019	30,495	477,325
TOTAL CATCH		12,462	815,050	101,575	235,866	331,058	1,496,011

1/ Taken from 1969 IBM statistical run.

Appendix Table 23. 1970 Cook Inlet salmon catch by stat area and gear. 1/

NORTHERN DISTRICT		KINGS	REDS	COHOS	PINKS	CHUMS	TOTALS
Set net	247	1,460	66,419	82,529	173,694	22,493	346,595
CENTRAL DISTRICT							
Drift	244	211	320,121	77,519	265,901	494,514	1,158,266
	245	147	139,544	32,188	67,508	183,017	422,404
Total Drift		358	459,665	109,707	333,409	677,531	1,580,670
Set net	244	5,367	142,421	30,264	281,396	1,228	460,676
	245	781	32,900	31,737	11,157	45,646	122,221
	246	381	29,776	20,742	14,104	2,814	67,817
Total set net		6,529	205,097	82,743	306,657	49,688	650,714
Seine	245		33	194	135	25,455	25,817
Central total		6,887	664,795	192,644	640,201	752,674	2,257,201
SOUTHERN DISTRICT							
Seine	241	64	665	2,390	189,554	6,298	198,971
Set net	241	26	11,455	1,154	18,512	1,575	32,722
Southern total		90	12,120	3,544	208,066	7,873	231,693
OUTER DISTRICT							
Seine	232	2	4,129	19	59,518	6,602	70,270
	241		22	90	9,819	50,855	60,786
	242	3	26	134	233,422	61,292	294,877
Outer total		5	4,177	243	302,759	118,749	425,933
KAMISHAK DISTRICT							
Seine	243		2,840	53	10,215	14,690	27,798
	248		6	165	12,285	81,151	93,607
Kamishak total			2,846	218	22,500	95,841	121,405
EASTERN DISTRICT							
Drift	231	4	1,598	7	26	7	1,642
Troll	231	6	97	657	7	1	768
Seine	231	1	60	27	40,193	625	40,906
Eastern total		11	1,755	691	40,226	633	43,316
			1970 Summary by gear				
01, Seine		70	7,781	3,072	555,141	246,968	813,032
03, Drift		362	461,263	109,714	333,435	677,538	1,582,312
04, Set net		8,015	282,971	166,426	498,863	73,756	1,030,031
05, Troll		6	97	657	7	1	768
TOTAL CATCH		8,453	752,112	279,869	1,387,446	998,263	3,426,143

1/ Totals vary from final stat run due to errors in the IBM run.

Appendix Table 24. 1971 Cook Inlet salmon catch by stat area and gear. 1/

NORTHERN DISTRICT		KINGS	REDS	COHOS	PINKS	CHUMS	TOTALS
Set net	247	9,598	40,533	22,094	8,423	16,603	97,251
CENTRAL DISTRICT							
Drift	244	88	368,278	26,161	5,040	188,061	587,628
	245	149	54,829	9,330	1,393	86,506	152,207
Total drift		237	423,107	35,491	6,433	274,567	739,835
Set net	244	7,055	111,505	16,589	18,097	128	153,374
	245	1,598	37,086	18,110	1,449	32,170	90,413
	246	1,277	24,058	8,078	1,188	477	35,078
Total set net		9,930	172,649	42,777	20,734	32,775	278,865
Seine	245		14	274	34	3,084	3,406
Central total		10,167	595,770	78,542	27,201	310,426	1,022,106
SOUTHERN DISTRICT							
Seine	241		5	1,702	41,495	1,505	44,707
Set net	241	41	18,398	1,449	8,564	1,352	29,804
Southern total		41	18,403	3,151	50,059	2,857	74,511
OUTER DISTRICT							
Seine	232	11	1,626	17	119,661	56	121,371
	241			54	10,426	114,489	124,969
	242		4	103	180,630	4,450	185,187
Outer total		11	1,630	174	310,717	118,995	431,527
KAMISHAK DISTRICT							
Seine	243		2	7	15,708	1,599	17,316
	248		1	114	16,386	24,728	41,229
Kamishak total			3	121	32,094	26,327	58,545
EASTERN DISTRICT							
Drift	231	16	2,198			422	2,636
Troll	231	5		1,102	1	1	1,109
	233			13			13
Eastern total		21	2,198	1,115	1	423	3,758
1971 Summary by gear							
01, Seine		11	1,652	2,271	384,340	149,911	538,185
03, Drift		253	425,305	35,491	6,433	274,989	742,471
04, Set net		19,569	231,580	66,320	37,721	50,730	405,920
05, Troll		5		1,115	1	1	1,122
TOTAL CATCH		19,838	658,537	105,197	428,495	475,631	1,687,698

1/ Taken from 1971 IBM statistical run.

Appendix Table 25 1972 Cook Inlet salmon catch by stat area and gear [1]

NORTHERN DISTRICT		KINGS	REDS	COHOS	PINKS	CHUMS	TOTALS
Set net	247	4,912	85,737	19,346	90,830	19,780	220,605
CENTRAL DISTRICT							
Drift	244	168	415,304	17,119	104,296	476,352	1,013,239
	245	207	90,977	4,458	10,827	88,419	194,888
Total drift		375	506,281	21,577	115,123	564,771	1,208,127
Set net	244	8,600	204,617	24,673	403,706	1,729	643,325
	245	1,352	53,980	12,013	11,497	38,179	117,021
	246	847	29,196	3,287	7,416	2,000	42,746
Total set net		10,799	287,793	39,973	422,619	41,908	803,092
Seine	245		13	37	8	3,689	3,747
Central total		11,174	794,087	61,587	537,750	610,368	2,014,966
SOUTHERN DISTRICT							
Set net	241	69	31,340	323	6,303	2,819	40,854
Seine	241		5	960	2,823	2,117	5,905
Southern total		69	31,345	1,283	9,126	4,936	46,759
OUTER DISTRICT							
Seine	232	7	26,420	3	682	2,434	29,546
	241		3	14	323	41,056	41,396
Outer total		7	26,423	17	1,005	43,490	70,942
KAMISHAK DISTRICT							
Seine	243		47	5	334	6,504	6,890
	248			26	8	19,870	19,904
Kamishak total			47	31	342	26,374	26,794
EASTERN DISTRICT							
Troll	231	10		902			912
Drift	231	2	77		1	55	135
Seine	231		5	1	18,189	688	18,883
Eastern total		12	82	903	18,190	743	19,930
1972 Summary by gear							
01, Seine		7	26,493	1,046	22,367	76,358	126,271
03, Drift		377	506,358	21,577	115,124	564,826	1,208,262
04, Set net		15,780	404,870	59,642	519,752	64,507	1,064,551
05, Troll		10		902			912
TOTAL CATCH		16,174	937,721	83,167	657,243	705,691	2,399,996

[1] Taken from the 1972 IBM statistical run.

Appendix

Table 26. 1973 Cook Inlet salmon catch by stat area and gear.[1/]

NORTHERN DISTRICT		KINGS	REDS	COHOS	PINKS	CHUMS	TOTALS
Set net	247	170	45,614	23,951	137,250	30,851	237,836
CENTRAL DISTRICT							
Drift	244	179	326,427	24,685	77,422	489,315	918,028
	245	65	49,268	7,099	14,479	116,423	187,334
Total drift		244	375,695	31,784	91,901	605,738	1,105,362
Set net	244	4,411	188,743	23,901	80,596	1,965	299,616
	245	214	25,144	17,127	10,070	27,956	80,511
	246	155	34,829	7,657	6,367	1,063	50,071
Total set net		4,780	248,716	48,685	97,033	30,984	430,198
Seine	245	0	0	0	0	0	0
Central Total		5,024	624,411	80,469	188,934	636,722	1,535,560
SOUTHERN DISTRICT							
Seine	241	5	102	152	77,352	1,214	78,825
Set net	241	134	23,970	1,089	20,222	2,374	47,789
Southern Total		139	24,072	1,241	97,574	3,588	126,614
OUTER DISTRICT							
Seine	232	1	5,052	4	10,031	40,909	55,997
	241		1	2	279	408	690
	242		10	25	186,949	35,024	222,008
Outer Total		1	5,063	31	197,259	76,341	278,695
KAMISHAK DISTRICT							
Seine	243	0	0	0	0	0	0
	248		1	28	12,568	35,584	48,181
Kamishak Total			1	28	12,568	35,584	48,181
EASTERN DISTRICT							
Troll	231			790	2		792
	233	5		11			16
Eastern Total		5		801	2		808
1973 summary by gear							
01 - Seine		6	5,166	211	287,179	113,139	405,701
03 - Drift		244	375,695	31,784	91,901	605,738	1,105,362
04 - Set net		5,084	318,373	73,725	254,503	64,209	715,896
05 - Troll		5		801	2		808
Total Catch		5,339	699,234	106,521	633,587	783,086	2,227,767

[1/]Source: 1973 IBM statistical run; 10-24-74.

Appendix Table 27.
Cook Inlet-Resurrection Bay area processors and related data, 1973.

Commercial Operator	Plant Location	Product	Average price to fishermen
Alaskan Seafoods, Inc. Box 173 Homer, Alaska 99603	Homer Spit	Frozen:	
		Reds	.75 per lb.
		Cohos	.40 per lb.
		Pinks	.31 per lb.
		Chums	.38 per lb.
		Halibut	.80 per lb.
		King Crab (whole)	.70 per lb.
		Dungeness Crab (whole)	.60 per lb.
		Tanner Crab (whole)	.17 per lb.
		Shrimp (whole)	.35 per lb.
		Shrimp (machine picked)	.07 per lb.
Alaskan Scallop Fleet, Inc. P.O. Box 7 Seward, Alaska 99664	Seward	Frozen:	
		Scallops (fresh)	1.26 per lb.
Columbia Wards Fisheries P.O. Box 30, University Station Seattle, Washington 98105	Kenai	Canned #1:	
		Kings	.50 per lb.
		Reds	.70 per lb.
		Cohos	.50 per lb.
		Pinks	.30 per lb.
		Chums	.42 per lb.
		Frozen:	
		Kings	.50 per lb.
		Reds	.70 per lb.
		Cohos	.50 per lb.
		Pinks	.30 per lb.
		Chums	.42 per lb.
		Halibut	.71 per lb.

Appendix Table 27 continued:

Cook Inlet-Resurrection Bay area processors and related data, 1973.

Commercial Operator	Plant Location	Product	Average Price to fishermen
D-J Enterprises Box 493 Seward, Alaska 99664	Seward, Alaska	Fresh & Frozen:	
		Cohos	.90 per lb.
		Pinks	.35 per lb.
		Reds	.70 per lb.
		Halibut	.75 per lb.
		Shrimp	1.75 per lb.
Dan's Cold Storage Box 122 Ninilchik, Alaska 99639	Ninilchik, Alaska	Frozen:	
		Kings	.71 per lb.
		Reds	.65 per lb.
		Cohos	.68 per lb.
		Pinks	.26 per lb.
		Chums	.40 per lb.
Ed's Kasilof Seafoods Box 18 Kasilof, Alaska	Kasilof, Alaska	Frozen:	
		Kings	.70 per lb.
		Reds	.65-.80 per lb.
		Cohos	.35-.70 per lb.
		Pinks	.27 per lb.
		Chums	.38 per lb.
Martin L. Goresen M/V Seahawk Box 1436 Seward, Ak. 99664	Seward, Alaska	Salted:	
		Herring (sac roe)	147.73 per ton
		Herring roe (on kelp)	.50 per lb.
Thomas Harris & James Lawson M/V Reel Dope 4811 Malibu Rd. Anchorage, Ak. 99501	Resurrection Bay	Frozen:	
		Herring (bait)	150.00 per ton

Appendix Table 27 continued:

Cook Inlet-Resurrection Bay area processors and related data, 1973.

Commercial Operator	Plant Location	Product	Average Price to fishermen
Laura A. Hermansen 3418 East 68th Ave. Anchorage, Alaska 99507	So. Humpy Point	Fresh:	
		Kings	.65 per lb.
		Reds	.60 per lb.
		Cohos	.30 per lb.
		Pinks	.26 per lb.
Tarvald Jensen & Co. Box 23 Ninilchik, Alaska	Ninilchik, Alaska	Smoked:	
		Kings	.70 per lb.
		Reds	.70 per lb.
		Chums	.40 per lb.
Keener Packing Co. Rt. 2 Soldotna, Alaska 99669	Soldotna, Alaska	Frozen:	
		Kings	.70 per lb.
		Reds	.68 per lb.
		Cohos	.52 per lb.
		Pinks	.26 per lb.
		Chums	.31 per lb.
		Canned - 1/2 lb. cans	
		Kings	.70 per lb.
		Cohos	.52 per lb.
		Canned Smoked:	
		Kings	.70 per lb.
		Cohos	.52 per lb.
Kenai Packers 1455 N Northlake Pl. Seattle, Washington 98103	Kenai, Alaska	Frozen and Canned:	
		Kings	.70 per lb.
		Reds	.60 per lb.
		Cohos	.34 per lb.
		Pinks	.26 per lb.
		Chums	.37 per lb.

Appendix Table 27 continued:

Cook Inlet-Resurrection Bay area processors and related data, 1973.

Commercial Operator	Plant Location	Product	Average Price to fishermen
Kenneth R. Lyons Sterling Route Homer, Ak. 99603	Homer, Alaska	Fresh: Shrimp (tails)	 2.00 per lb.
Paul A. Mitchell Box 479 C SRA Anchorage, Ak. 99502	West side of Cook Inlet	Fresh: Reds Cohos	 .50 per lb. .50 per lb.
North Coast Seafood Export Box 645 Homer, Ak. 99603	Homer, Ak.	Brine Packed: Herring (roe) Roe on kelp	 140.00 per lb. .65 per lb.
Osmars Ocean Specialties Box 38 Clam Gulch, Alaska	Clam Gulch, Alaska	Frozen: Kings Reds Cohos Pinks Chums Halibut	 .73 per lb. .72 per lb. .63 per lb. .30 per lb. .37 per lb. .70 per lb.
R-Lee Seafoods, Inc. Route 2 Soldotna, Alaska 99669	Kalifonsky Beach	Frozen: Kings Reds Cohos Pinks Chums Herring (bait)	 .75 per lb. .80 per lb. .70 per lb. .36 per lb. .50 per lb. .10 per lb.
Salamatof Seafoods, Inc. Box 1045 Mi 17 N Kenai, Ak. 99611	Kenai, Alaska	Canned - 1 lb. cans: Kings Reds Cohos Pinks Chums	 .80 per lb. .80 per lb. .70 per lb. .28 per lb. .44 per lb.

Appendix Table 27continued:

Cook Inlet-Resurrection Bay area processors and related data, 1973.

Commercial Operator	Plant Location	Product	Average Price to fishermen
Terrell Schenk & Assoc., Inc. Route 2 Kasilof, Ak. 99610	Kasilof, Alaska	Frozen:	
		Kings	.75 per lb.
		Reds	.84 per lb.
		Cohos	.70 per lb.
		Pinks	.31 per lb.
		Chums	.40 per lb.
Sea Shop General Delivery Homer, Ak. 99603	Homer Spit	Frozen:	
		King Crab	.82 per lb.
		Dungeness Crab	.60 per lb.
		Tanner Crab	.20 per lb.
		Shrimp	.40 per lb.
Seward Fisheries Box 516 Seward, Alaska 99664	Seward, Ak.	Canned - 1 lb. cans:	
		Kings	.64 per lb.
		Reds	.56 per lb.
		Cohos	.36 per lb.
		Pinks	.31 per lb.
		Chums	.41 per lb.
		Frozen:	
		Kings	.64 per lb.
		Reds	.56 per lb.
		Cohos	.36 per lb.
		Chums	.41 per lb.
		Halibut	.71 per lb.
		Herring	.07 per lb.
		King Crab	.64 per lb.
		Dungeness Crab	.60 per lb.
		Tanner Crab	.17 per lb.
		Shrimp	.26 per lb.
		Scallops	1.26 per lb.
		Gray Cod	.22 per lb.
		Bottom Fish	.20 per lb.

Appendix Table 27 continued:

Cook Inlet-Resurrection Bay area processors and related data, 1973.

Commercial Operator	Plant Location	Product	Average Price to fishermen
Seward Marine Services Box 335 Seward, Alaska 99664	Seward, Alaska	Herring Roe	.08 per lb.
Smoked Alaskan Seafoods Box 13 Clam Gulch, Alaska 99568	Clam Gulch, Ak.	Canned & Smoked - 8 oz. can Reds Cohos	 .76 per lb. .68 per lb.
Sourdough Kitchens P.O. Box 166 Seldovia, Ak. 99663	Cinder River	Fresh: Cohos	 .35 per lb.
Sparkys Seafoods Box 160 Seldovia, Ak. 99664	Seldovia, Ak.	Frozen: King crab Dungeness crab	 .60 per lb. .35 per lb.
Tidewater Packing Co. Box 1842 Anchorage, Ak. 99501	Anchorage, Ak.	Canned & Smoked - 1/2 # Reds Cohos Pinks Chums Fresh: Reds	 .70 per lb. .50 per lb. .30 per lb. .42 per lb. .70 per lb.
Western Alaska Enterprises, Inc. Suite 705; 1424 4th Avenue Seattle, Washington 98101	Soldatna, Alaska	Frozen: Kings Reds Cohos Pinks Chums	

Appendix Table 27 continued:

Cook Inlet-Resurrection Bay area processors and related data, 1973.

Commercial Operator	Plant Location	Product	Average Price to fishermen
Whitney-Fidalgo Seafoods, Inc. P.O. Box 99008 Seattle, Washington 98199	Anchorage, Alaska	Canned - 1/2 lb. cans:	
		Kings	.70 per lb.
		Reds	.70 per lb.
		Cohos	.50 per lb.
		Pinks	.30 per lb.
		Chums	.42 per lb.
		Brined:	
		Herring roe	.08 per lb.
Whitney-Fidalgo Seafoods, Inc. 2360 W. Commodore Way Seattle, Washington 98199	Port Graham, Ak.	Canned-1 lb. cans:	
		Kings	.70 per lb.
		Reds	.70 per lb.
		Cohos	.50 per lb.
		Pinks	.30 per lb.
		Chums	.42 per lb.
		Brined:	
		Herring roe	.08 per lb.
Whitney-Fidalgo Seafoods, Inc. 2360 W. Commodore Way Seattle, Washington 98199	Anchorage, Ak.	Frozen:	
		Kings	.59 per lb.
		Reds	.78 per lb.
		Cohos	.53 per lb.
		Pinks	.26 per lb.
		Chums	.45 per lb.
		Halibut	.73 per lb.
		Herring	.08 per lb.
		King crab	.80 per lb.
Whitney-Fidalgo Seafoods, Inc. P.O. Box 99008 Seattle, Washington 98199	Homer, Ak.	Frozen:	
		King crab	.65 per lb.

Appendix Table 27 continued:

Cook Inlet-Resurrection Bay area processors and related data, 1973.

Commercial Operator	Plant Location	Product	Average Price to fishermen
Williams Processing P.O. Box 1232 Homer, Ak. 99603	Homer, Alaska	Frozen:	
		King crab	.45 per lb.
		Tanner Crab	.12 per lb.
		Shrimp	.40 per lb.
10th and M Lockers and Cold Storage, Inc. 1020 M. Street Anchorage, Alaska 99501	Anchorage, Alaska	Frozen:	
		Kings	.80 per lb.
		Reds	.70 per lb.
		Cohos	.70 per lb.
		Pinks	.33 per lb.

Appendix Table 28
Temporary employees working in Cook Inlet management area, 1973.

NAME	STEP	PROJECT
Benoit, Terry A.	Fishery Biologist I	Fish Creek
Castoldi, Robert	Fishery Biologist I	Shellfish
DeJong, Bob	Fishery Biologist I	Fish Creek
Dunaway, Dan	Fish Technician II	Talachulitna Tower
Friese, Nancy	Fishery Biologist I	Inventory
Gallup, John	Fish Technician III	Beach Survey
Garber, Mike	Fish Technician II	King Crab
Gensel, John	Fish Technician II	Pink Salmon Forecast
Gross, Joseph	Fish Technician II	Talachulitna Tower
Hannah, Robert D.	Fish Technician III	Susitna Stream Surveys
Henwood, Diane	Clerk Typist II	Office Help
Hill, Ken	Fishery Biologist I	Kasilof Sonar
Hollier, Gary	Fish Technician III	Test Fish
Hollingsworth, Craig	Fish Technician III	Talachulitna Tower
House, Don E.	Fish Technician III	Test Fish
Luke, Jim	Fishery Biologist I	Kenai Sonar
McLean, Robert	Fish Technician III	Jean/Hidden
Nehus, Robert	Fishery Biologist I	Kalgin Island
Nelson, Robert	Fishery Biologist I	Susitna Stream Surveys
Sanders, Howard	Fish Technician III	Test Fish
Schaefer, Gary	Fishery Biologist I	Talachulitna Tower
Seitz, James	Fish Technician II	Kalgin Island
Sundstrom, Jeffery	Fishery Biologist I	Port Dick
Urch, Dolores	Clerk Typist II	Office Help
Watson, James B.	Fish Technician III	Pink Salmon Forecast
Wilcox, Ken	Fish Technician I	Port Dick
Wilton, John	Fish Technician III	Kenai Sonar
Yuen, Henry	Fishery Biologist I	Kalgin Island
Zempel, Mark	Fish Technician III	Kasilof Sonar

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SECTION II

Southern, Outer, Kamishak and Eastern districts.

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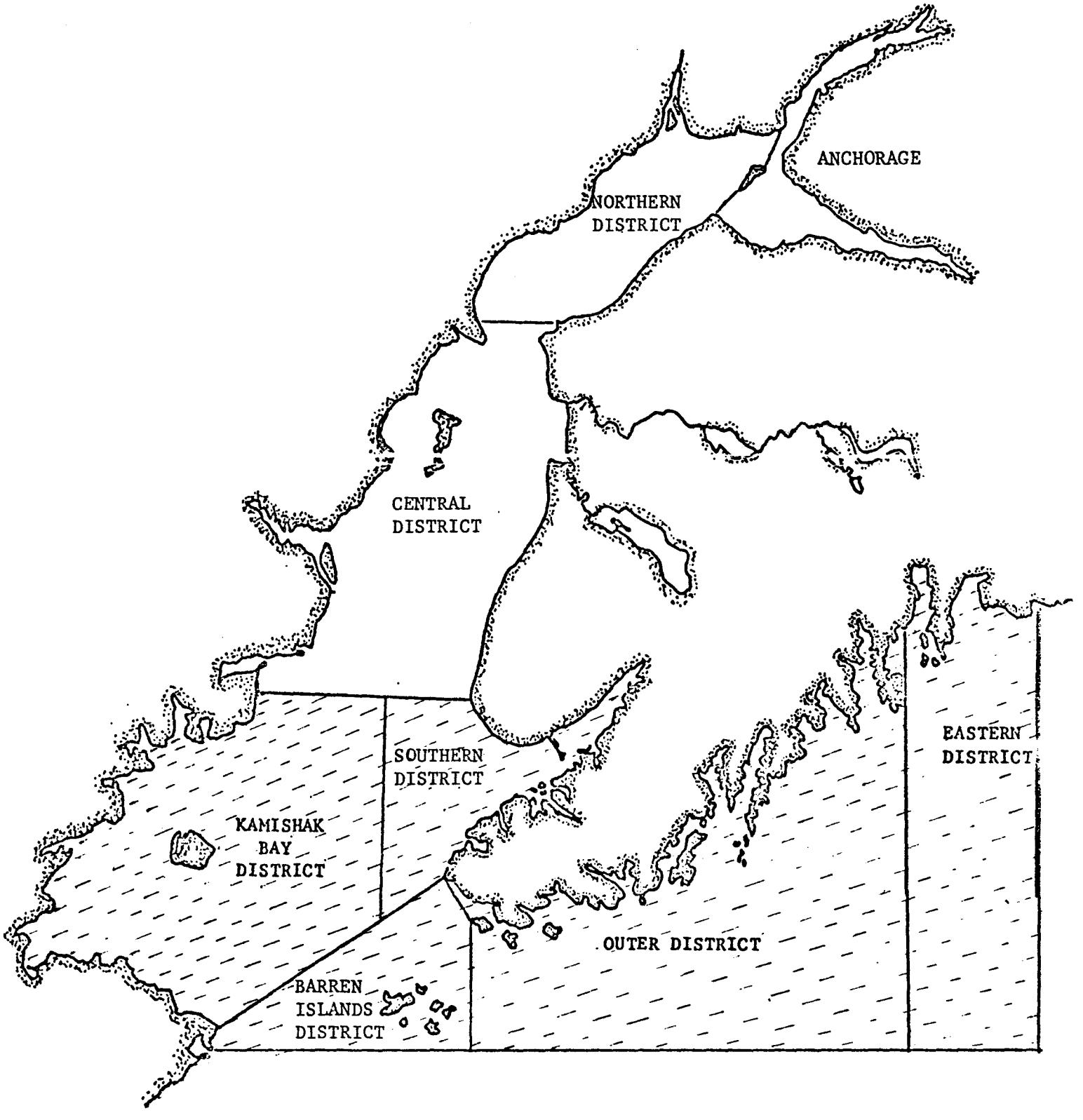
INTRODUCTION

The Southern, Kamishak, Barren Islands, Outer, and Eastern districts of the Cook Inlet management area include all waters south of the latitude of Anchor Point, north of Cape Douglas and West of Cape Fairfield, including the Barren Islands, southern Cook Inlet, the Outer Kenai Peninsula and Resurrection Bay (Figure 1).

With the exception of razor clams, practically all shellfish harvested in the Cook Inlet area are from these districts. Trawl and pot caught shrimp, king, tanner and dungeness crabs are the primary commercial species. These shellfish are also harvested by subsistence/sport fishermen. In addition, cockles, scallops and various hardshelled and softshelled clams are utilized by subsistence/sport fishermen.

The five North American Pacific species of salmon are of commercial importance. Pink salmon are the "bread and butter" salmon for the area as a whole. Salmon are taken commercially by seines and set nets in the Southern district and by seines only in the other districts. Herring, halibut, cod, rockfish, pollock, smelt and other miscellaneous finfish are also taken by commercial and subsistence/sport fishermen.

Figure 1 Cook Inlet commercial fisheries management area



SHRIMP

The Cook Inlet shrimp catch for 1973 totaled 4.9 million pounds. Table 1 shows the 1973 catch by month, number of landings and number of vessels participating. Appendix Table 1 shows Cook Inlet shrimp catches since 1960.

Trawl catches:

The 1973 trawl catch of 4,549,804 pounds was taken by ten boats making 338 landings. At present there are two quota periods for a portion of the Southern district (Kachemak Bay); June 1 through October 31 and November 1 through March 31, with a quota of 2.5 million pounds for each period. The remainder of Cook Inlet has a trawl season from June 1 through March 31 but does not have set quotas. Appendix Table 2 shows annual trawl shrimp landings in pounds for Cook Inlet, 1969-1973. Appendix Table 3 gives mean monthly catch per hour trawled in Kachemak Bay, 1969-1973.

Pot catches:

The 1973 Cook Inlet pot shrimp catch of 327,000 pounds was the greatest on record. For comparison recent annual catches are: 1972, 171,386 pounds; 1971, 53,462 pounds; 1970, 9,473 pounds. The increased catch for 1973 was attributable to three main factors: (1) increased effort; (2) good abundance of pot shrimp and (3) relatively steady market conditions. This fishery has been notorious for off and on marketing conditions in past years. Almost all the effort at the present time is in Kachemak Bay. In 1973, 41 boats made 761 landings. For past years: 1972, 17 boats, 361 landings; 1971, 11 boats, 187 landings; 1970, 8 boats, 33 landings (Appendix Table 4).

Table 1. Cook Inlet shrimp catches by month, pounds, vessels and landings 1973.

Month	Trawls	Number of Vessels	Landings	Pots	Number of Vessels	Landings	Trawls and Pots Total Pounds
January	450,873	5	45	13,883	7	39	464,756
February	443,266	5	33	35,585	6	66	478,851
March	102,614	1	6	18,964	9	47	121,578
April	49,625	2	2	32,780	9	77	82,405
May	no fishing	0	0	22,818	9	72	22,818
June	615,078	4	52	20,239	9	39	635,317
July	1,086,344	7	79	11,946	2	8	1,098,290
August	727,595	3	46	20,036	5	8	747,631
September	73,137	2	4	11,417	10	58	84,554
October	no fishing	0	0	34,088	15	99	34,088
November	431,023	3	38	66,864	17	160	497,887
December	570,249	3	33	38,380	19	88	608,629
TOTAL	4,549,804	10	338	327,000	41	761	4,876,804

**Economic value to fishermen: Trawl shrimp at .08 per pound ≈ 364 thousand dollars
Pot shrimp at .35 per pound ≈ 115 thousand dollars

Over 90% of the pot shrimp catches are coonstripes, basically a one-species fishery. Approximately 4% (200,000 pounds) of the trawl catch in Kachemak Bay is also composed of coonstripes.

If the market holds up, pot shrimping effort will continue to increase, therefore, a pot shrimp quota will be proposed for Kachemak Bay.

KING CRAB

1973 Season:

The 1973 Cook Inlet king crab harvest of 4.4 million pounds fell short of the 1972 catch by .2 million pounds and exceeded the 1971 catch by .2 million pounds. The Southern district, which included the Kachemak Bay area accounted for 2.1 million pounds and the total for all other districts was 2.3 million pounds. The 1973 king crab catch in pounds, by district, by month, number of vessels and landings is given in Table 2. Catches by district since 1963 are given in Appendix Table 5. Landings and crab per landing since 1960 are shown in Appendix Table 6. Economic values are in Appendix Table 7.

Effort, as measured by number of landings, increased in the Cook Inlet area during 1973. In the Southern district, a total of 1,088 landings were made which was 77 more than in 1972 and 231 more than in 1971. In the Kamishak, Barren Islands and Outer districts 152 landings were made compared to 119 landings in 1972 and 134 landings in 1971. Catch per unit of effort as measured by landings divided into number of crabs taken, was as follows: In the Southern district crabs per landing totaled 253 in 1973 as compared to 236 in 1972 and 179 in 1971. In the Kamishak, Barren Islands and the Outer districts there were 1,976 king

Table 2. Cook Inlet king crab landings, in pounds, by district, by month, number of vessels, number of landings, 1973.

Month	Southern Pounds	Southern Vessels	Southern Landings	Kamishak Pounds	Kamishak Vessels	Kamishak Landings	Barren Islands Pounds	Barren Islands Vessels	Barren Islands Landings	Outer Pounds	Outer Vessels	Outer Landings	Total Catch
Jan.	93,499	22	69	1,768	1	1	32,375	3	3	0	0	0	127,642
Feb.	308,347	25	160	0	0	0	7,524	1	1	0	0	0	315,871
Mar.	154,464	23	123	65,476	4	8	700	1	1	0	0	0	220,640
Apr.	---	---	---	---	---	---	---	---	---	---	---	---	---
May	---	---	---	---	---	---	---	---	---	---	---	---	---
June	---	---	---	---	---	---	---	---	---	---	---	---	---
July	---	---	---	---	---	---	---	---	---	---	---	---	---
Aug.	1,090,983	33	319	1,149,638	12	51	11,228	1	1	0	0	0	2,251,849
Sept.	193,788	30	136	337,046	11	21	39,514	2	3	1,161	1	1	571,509
Oct.	61,477	22	50	104,301	7	14	117,149	4	4	2,029	2	2	284,956
Nov.	94,074	30	126	171,255	10	13	166,713	7	11	548	1	1	432,590
Dec.	94,368	30	105	89,436	11	17	0	0	0	0	0	0	183,804
TOTALS	2,091,000	58	1,088	1,918,920	12	125	375,203	8	24	3,738	4	4	4,388,861

Total Vessels: 63 Total Landings: 1,241 Total Pounds: 4,388,861

crab per landing which was an average figure since the fishery began in 1961. Average weight of crabs landed in the Southern district for the entire year was 7.6 pounds, down about one pound from 1972. In the Kamishak, Barren Islands and Outer districts the average weight was also 7.6 pounds as compared to 8.2 pounds in 1972.

A significant increase in the abundance of recruit size king crabs was observed in both districts during 1973. In the Southern district 60% of the crab harvested in the summer fishery were recruits while in the Kamishak and Outer districts 67% were recruits. A comparison of length frequencies of commercial caught king crab taken in 1963 and in recent years appears in Appendix Table 8.

1973-1974 Quota Period:

The king crab season and quota period in Cook Inlet runs from August 1 to March 31. The quota in the Southern district is 2.0 million pounds while all other districts have a 3.5 million pounds quota. In April 1972, the Board increased the season by one month and increased the outside (all districts except Southern) quota by 1.0 million pounds. Redistribution of the outside quota of 3.5 million pounds, based on tagging which shows some stocks are fished in both quota areas, will be recommended. Preliminary figures indicate an approximate quota shortfall of 50,000 pounds in the Southern district and 1,000,000 pounds in all other districts combined.

Ice conditions in the Kamishak district prevented boats from fishing this area in 1974 until the latter part of March.

Each year biologists accompany commercial king crab boats to the fishing grounds to determine catch composition and timing of the reproductive cycle. Based on biological findings, decisions are made to regu-

late the closing date of the king crab season. In early 1974, because there was no fishery in the Kamishak district until after the middle of March, efforts were concentrated in the Southern district, or the Kachemak Bay area. By mid-March, molting of all king crab was well under way and egg hatching had started. On 5 trips made from March 1 through March 18, 45% of sublegal size and 5% of legal size crab were in new shell condition. By this same date, 12% of the female crab had completed egg hatching and had molted. For these reasons the Southern district was closed on March 20, 1974; 11 days earlier than the calendar closing. Data collected from the past several seasons indicate molting and mating is well under way by mid-March and a change recommending a mid-March season closure on king crab will be proposed.

TANNER CRAB

The 1973 Cook Inlet tanner crab catch of 8.5 million pounds was the highest on record since the fishery developed. By way of comparison, the 1972 catch was 4.8 million pounds; 1971 catch was 2.1 million pounds; 1970, 1.3 million pounds; 1969, 1.5 million pounds; and in 1968, the first year of any commercial effort, the catch was 165 thousand pounds. The large catch in 1973 was the result of increased effort as 8 boats participated in the fishery and made 1,555 landings. In 1972, 43 boats fished for tanners and made 956 landings. In 1971, 40 boats fished for tanners; however, only 613 landings were made. 44% of the 1973 catch, 3.8 million pounds, was taken in the Southern district, 3.4 million pounds were taken in the Kamishak district and for the second consecutive year a substantial effort in the Outer and Eastern districts yielded 1.3 million pounds. The average weight of tanner crab in the commercial catch in 1973 was 2.6 pounds, compared to an average weight in 1972 of

2.5 pounds and in 1971 of 2.4 pounds. The catch, number of landings, number of vessels engaged in the fishery, and average weights by year since 1968 appear in Appendix Table 9.

The major portion of tanner crab harvested falls in the 140 to 160 mm class, which would be crab from about 5" to 6" in width. (Figures 2 and 3) One reason for the increase in tanner crab effort was the increase in prices paid to fishermen. In 1971 the average price paid was 11 cents per pound. By January of 1972 the fishermen were receiving 14 cents per pound and later in the year the price jumped to 17 cents per pound and ended the 1973-74 season at 20 cents. Many fishermen found that they could make more money fishing tanner crab than king crab and, as a result, effort on tanner crab was greatly expanded. Most landings that are made consist of both kings and tanners when both seasons are open concurrently. In past years, tanner crab catches were always incidental to king crab; however, for the past two seasons many fishermen concentrated effort on tanners and the king crab catches were incidental. Many fishermen used small mesh web on their king crab pots and equipped them with 4" tunnel openings even before the king crab season closed.

Tanner crab catches by district, by month for 1973 appear in Table 3, while the relationship between tanner crab catches and effort is depicted in Figure 4.

The lower catch per pot for Kachemak Bay, Spring of '74 (Table 4) combined with the dramatic increase in effort in all districts illustrates the need for more adequate conservation measures to properly manage the Cook Inlet tanner crab resource. Quotas for each primary fishing area and a change in season to harvest the available resource in those months when tanners are in better condition, will be proposed.

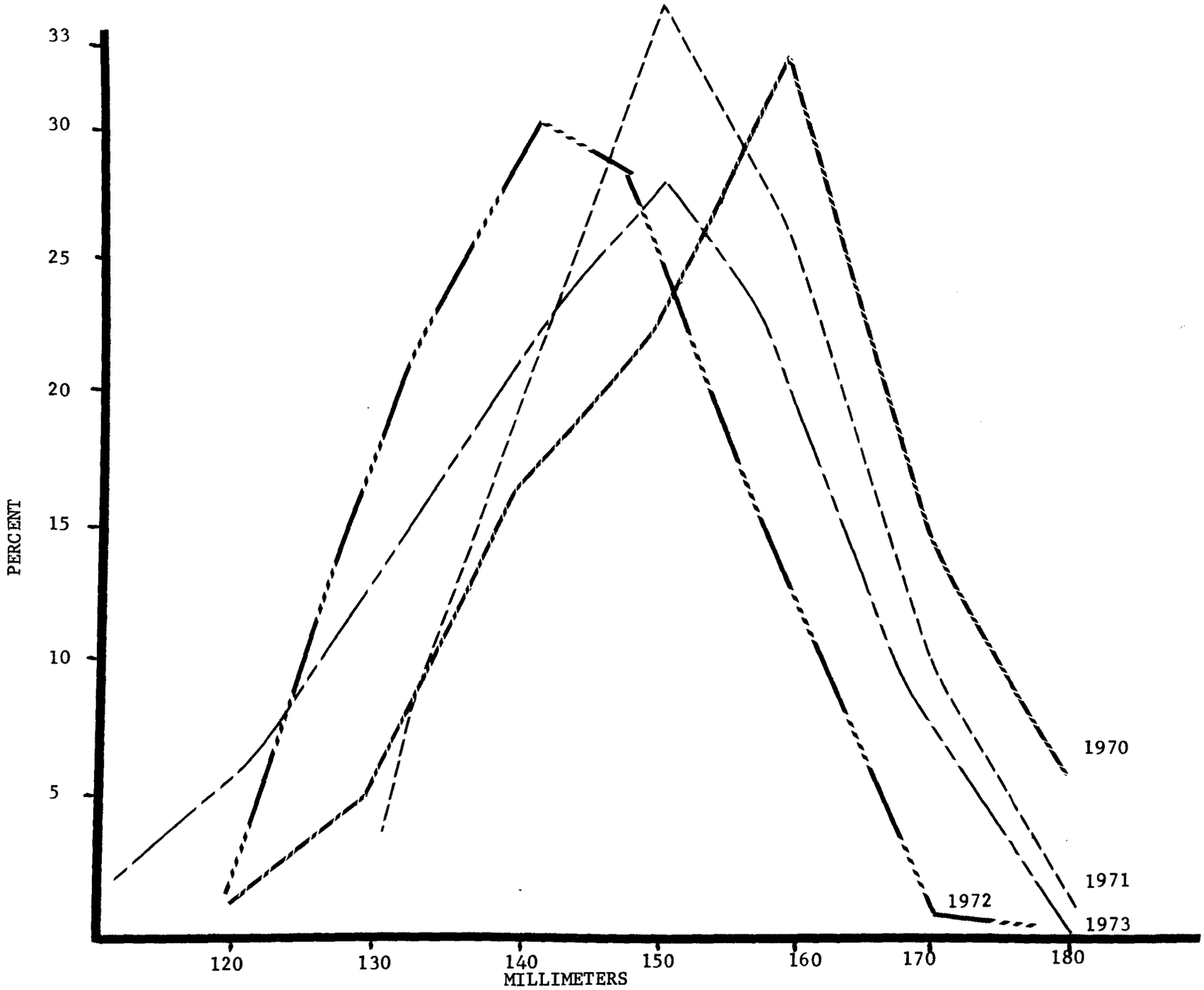


Figure 2. Tanner crab size frequencies, Cook Inlet

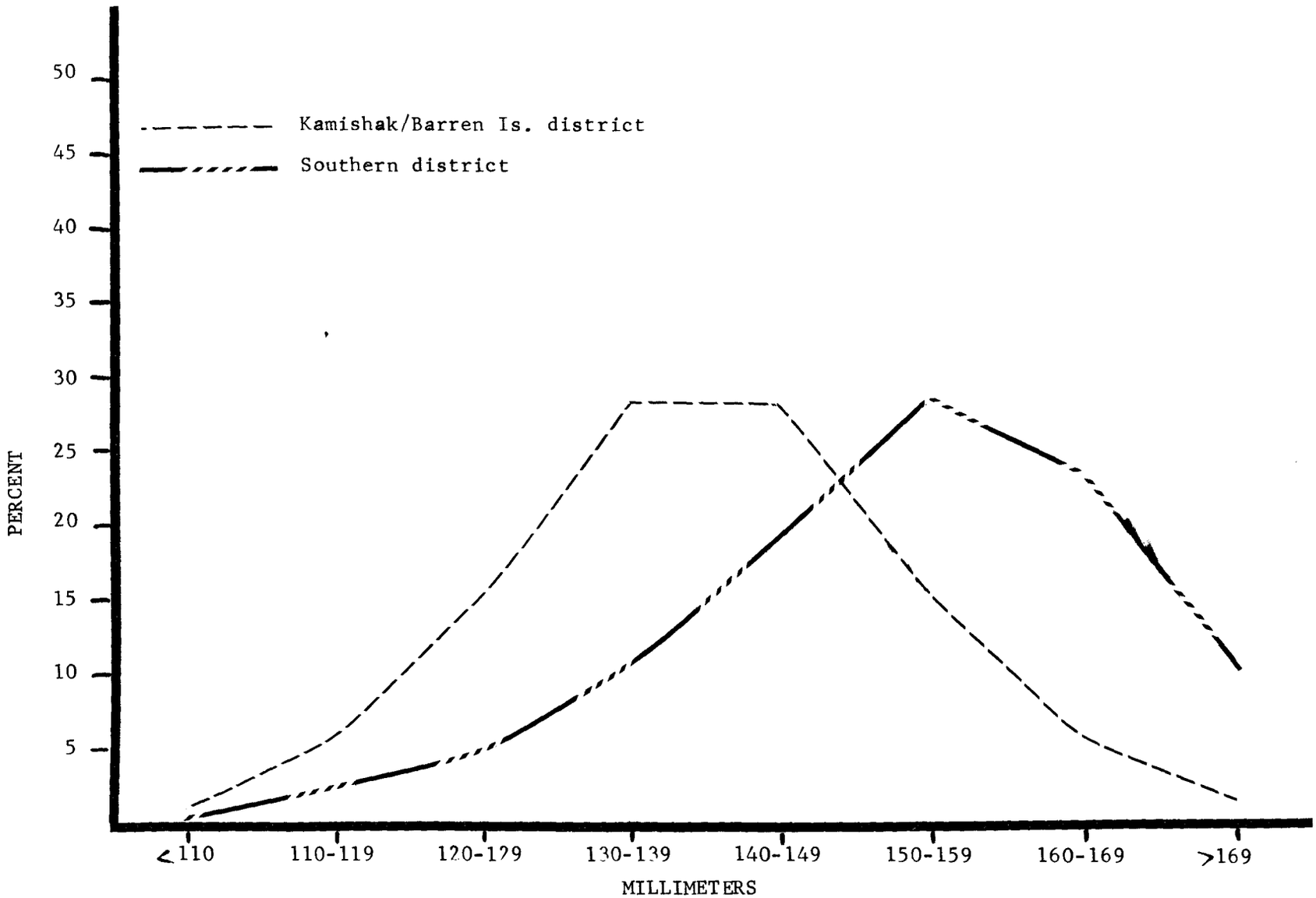


Figure 3. Cook Inlet tanner crab width frequencies, 1973.

Table 3. Cook Inlet tanner crab landings, in pounds, by district by month, number of vessels, number of landings, 1973.

Month	District Southern	Kamishak	Barren Is.	Outer	Eastern	Total Catch
January						
pounds	223,061	---	1,084	---	12,464	236,609
vessels	23	---	1	---	1	
landings	83	---	1	---	2	
February						
pounds	550,652	---	8,312	244,672	77,666	881,302
vessels	28	---	1	1	5	
landings	183	---	1	8	5	
March						
pounds	743,100	175,184	20,520	370,205	227,258	1,536,267
vessels	27	5	2	3	7	
landings	234	13	2	10	9	
April						
pounds	554,320	933,783	---	211,156	70,688	1,769,927
vessels	22	7	---	3	5	
landings	152	28	---	11	5	
May						
pounds	336,687	1,183,135	---	19,580	15,499	1,554,901
vessels	18	9	---	2	2	
landings	82	39	---	2	2	
June						
pounds	229,648	1,088,796	---	6,489	7,654	1,332,587
vessels	13	9	---	1	1	
landings	62	44	---	2	1	
July	---	---	---	---	---	---
August	---	---	---	---	---	---
September	---	---	---	---	---	---
October	---	---	---	---	---	---
November						
pounds	829,179	22,200	10,238	220	---	861,837
vessels	48	4	1	1	---	
landings	383	9	2	1	---	

Table 3 continued:

Month	District Southern	Kamishak	Barren Is.	Outer	Eastern	Total Catch
December						
pounds	287,713	48,476	---	---	---	336,189
vessels	41	8	---	---	---	
landings	168	11	---	---	---	
TOTALS:						
pounds	3,754,360	3,451,574	40,154	852,322	411,209	8,509,619
vessels	68	15	5	4	9	
landings	1,347	144	6	34	24	

Total Vessels: 80 Total Landings: 1,555 Total Pounds: 8,509,619

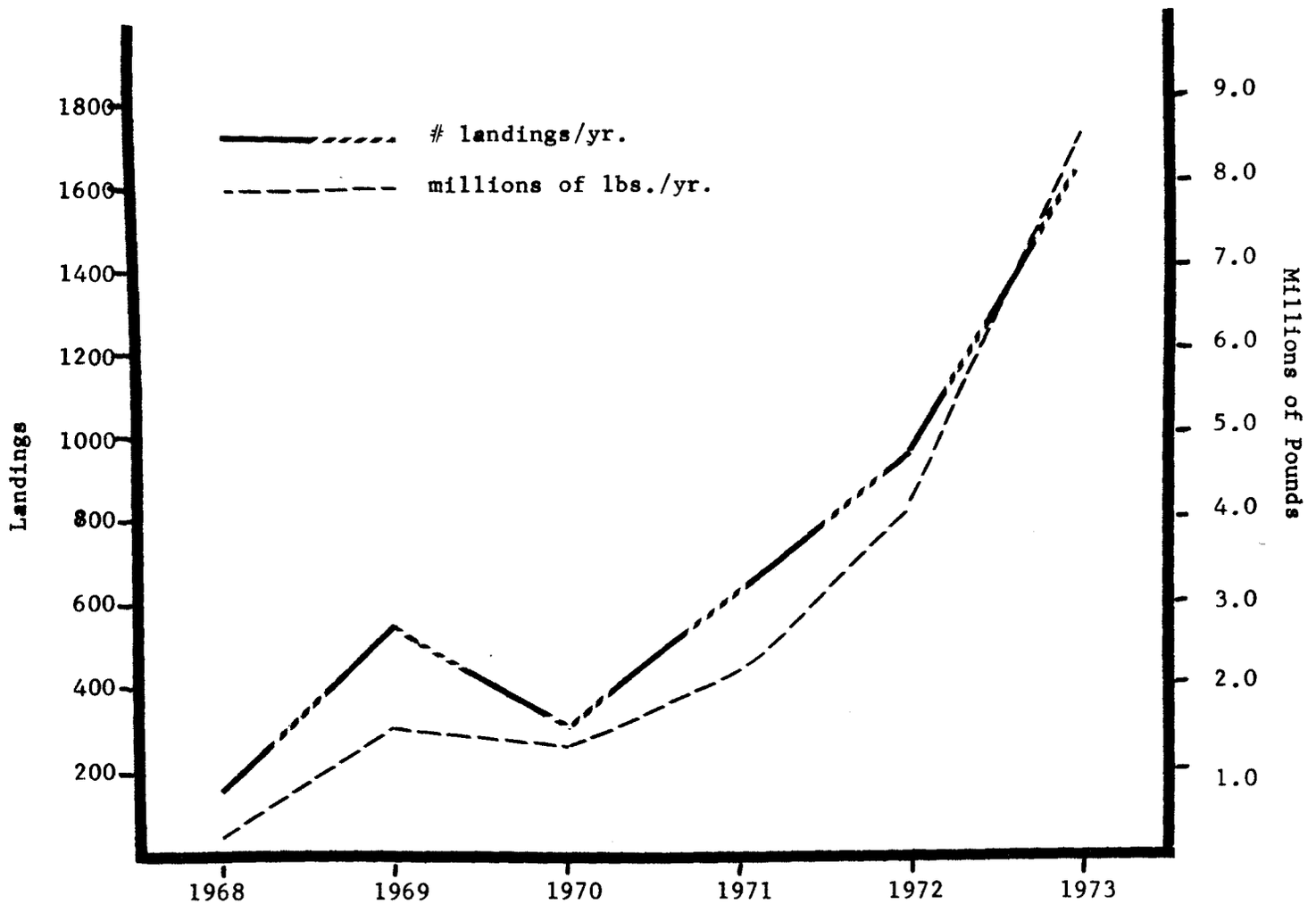


Figure 4. Tanner crab landings, Cook Inlet, 1968-1973.

Table 4. Shipboard sampling, tanner crab catches, Kachemak Bay.

Year	No. of Trips	No. Pots Pulled	Total Tanners	Tanners Per Pot
March 1973	5	114	2,062	18
March 1974	5	125	724	6

DUNGENESS CRAB

The 1973 Cook Inlet dungeness crab catch of 310,048 pounds was the greatest on record since 1964. For comparison, recent yearly catches are: 1972, 38,930 pounds; 1971, 96,846 pounds; 1970, 208,577 pounds. The larger catch in 1973 was the result of increased effort as 51 boats participated in the fishery and made 625 landings. Table 5 gives the 1973 dungeness crab landings in pounds, by district, by month, number of vessels, and number of landings. In 1972, 23 boats made 225 dungeness landings. In 1971, 21 boats made 134 landings and in 1970, 9 boats made 49 landings. The major portion of all these catches were made in Kachemak Bay. Also in 1973, for the first time since 1968, the best fishing was in the late fall concentrated in outer Kachemak Bay near the outer corner of the crab sanctuary (Figure 5) on large "ocean" crabs, some weighing over 5 pounds. Appendix Table 10 shows the Cook Inlet dungeness crab catch in pounds by month for 1966-1973. Appendix Table 11 gives total annual catches since 1961.

The good price, over 60 cents per pound, and the resulting good wages made in 1973 have encouraged fishermen to invest in the Cook Inlet dungeness fishery. A significant increase in effort and gear is expected for 1974.

Because of the cyclic nature of the dungeness fishery, it may not be suitable for quota type management. However, a partial closure of Kachemak Bay during the breeding season to protect a portion of the dungeness stocks during this critical period will be proposed. Additional restrictions may be required with the expected increase in effort.

Table 5. Cook Inlet dungeness crab landings, in pounds, by district, by month, number of vessels, number of landings, 1973.

Month	Southern Pounds	Southern Vessels	Southern Landings	Outer Pounds	Outer Vessels	Outer Landings	Total Pounds
January	3,727	17	47				3,727
February	703	15	58				703
March	158	9	15				158
April	4,032	6	21				4,032
May	11,429	8	55	954	1	1	12,383
June	12,742	7	46				12,742
July	7,861	5	25				7,861
August	8,224	7	30				8,224
September	36,069	21	36				36,069
October	147,502	21	126				147,502
November	68,243	29	108				68,243
December	8,404	22	57				8,404
TOTALS	309,094	50	624	954	1	1	310,048

Total vessels: 51[1/] Total landings: 625 Total pounds: 310,048

[1/] Eleven of these vessels delivered dungeness crabs as incidental catches with king and tanner crabs.

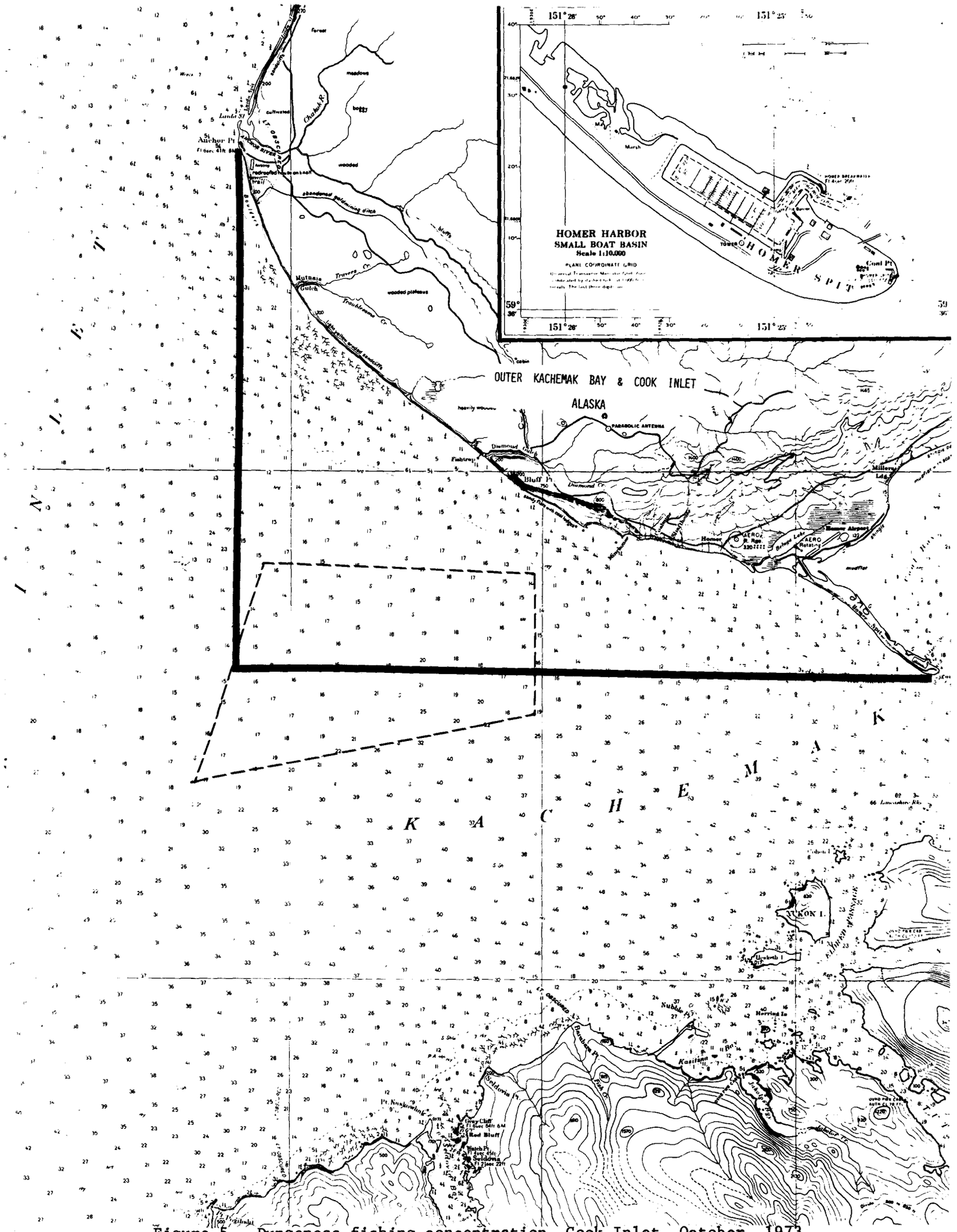


Figure 5. Dungeness fishing concentration, Cook Inlet, October, 1973.

RAZOR CLAMS

One of the three Alaskan beaches approved for the commercial harvest of razor clams is in the Cook Inlet management area, Polly Creek beach, located on the western side of Cook Inlet north of Tuxedni Bay. This beach is in the Central district, however, since it is the only commercial shell fishery outside of the districts covered in this report, it is included here. The commercial razor clam season is open from September 1 through July 15. There is little restriction on legal gear, mechanical and hydraulic equipment is allowed; however, the commercial harvest in 1973 was taken by hand operated shovels. Landings by month for 1973 are shown in Table 6.

MISCELLANEOUS SHELLFISH

Scallops:

There is no commercial scallop fishery in the Cook Inlet area at present. Commercial fishing for scallops is not allowed in most of Cook Inlet, including Kachemak and Kamishak Bays, and inshore waters of the Outer district. Scallop beds are located in some of these areas and would probably support an effort of two boats each fishing a single dredge of not over 10 feet in width. A scallop season, if proposed, should coincide with the period when most crab species are in hard shelled condition and are able to escape the slow moving dredge, October 1 through January 31. Areas of known concentration of dungeness crabs should be excluded from scallop dredging.

Octopii:

In 1973 octopii were landed commercially. These were taken incidentally

Table 6. Cook Inlet razor clam landings in pounds, by month, number of landings, 1973.

Month	Pounds (in shell)	Landings
May	5,508	25
June	17,553	73
July	11,354	47
TOTALS	34,415	145

in king crab pots and were sold for bait at 40 cents per pound to the fishermen. This year 5,800 pounds were landed, primarily from the Barren Islands district.

Hardshell Clams:

A one family operated cannery at Kasitsna Bay, near McDonald spit in the Southern district, has "grandfather's" rights and a history of Alaska Department of Health and Social Services monitored production. These clams are cooked and canned. Annual production records should be obtained for historical reference.

Sea Urchins:

Interest has been expressed in the commercial harvest of sea urchin roe. Extraction and salting of the roe prior to shipment would be required.

SHELLFISH SUBSISTENCE

King, tanner and dungeness crabs are all harvested to some degree by subsistence/sport fishermen. Shrimp, primarily coonstripe, are taken using pots and ring nets. Cockles, scallops, other hard-shelled and soft-shelled clams are also utilized by the subsistence/sport fishermen. Most of this activity takes place in Kachemak Bay. The amount of effort and total harvest has not been documented. The amount of man days spent in these activities is considerable and increasing each year. The actual catch is insignificant compared to the commercial shellfish take but it is of economic (tourism) and personal importance to those involved.

SALMON

Overview:

The 1973 salmon catch of 454.3 thousand (0.2 kings, 29.1 reds, 2.1 cohos, 307.4 pinks, and 115.5 chums) was the eighth poorest on record since 1954. The average annual catch for the past 20 years was 699.3 thousand. Table 7 shows the catch by statistical area for these districts in 1973. Appendix Table 12 shows catches by species by district since 1954. The 1973 catch by primary species by district and week for three districts is given in Table 8. Pink salmon catches by bay during even years is shown in Appendix Table 13. Pink salmon catches by bay during odd years is shown in Appendix Table 14.

Estimated pink salmon escapements, by primary system, for the Southern and Outer districts since 1962 are given in Appendix Table 15. Ground stream survey results from the Southern district in 1973 are shown in Table 9. Aerial surveys are given in Table 10. Ground stream survey results from the Outer district in 1973 are given in Table 11. Aerial surveys are shown in Table 12. Aerial surveys of the Kamishak district from 1965-1973 are given in Appendix Table 16.

Southern District:

The total salmon catch for the Southern district in 1973 was 126,614 fish and accounted for 5.7 percent of the total Cook Inlet catch. This was the best odd year catch since 1967. (Appendix Table 17)

Historically, pink salmon have furnished the major portion of the catch in the Southern district. (80%) The 1973 pink harvest of 97,574 was the best odd year harvest since 1963. However, it also appears that as of this year the odd-year run is now dominant for the first time since 1955, when over 1/2 million pink salmon were caught in the Southern district.

Table 7. 1973 salmon catch by species, gear and statistical area, Southern, Kamishak, Outer and Eastern districts of Cook Inlet.

District	Species					
	Kings	Reds	Cohos	Pinks	Chums	Total
OUTER						
232-10	1	33	3	1,559	24,068	25,664
-21				1,325	5	1,330
-22						0
-23		1,075		29	605	1,709
Nuka Subtotals	1	1,108	3	2,913	24,678	28,703
232-15		380	1	5,192	16,162	21,735
-30		507		9	14	530
-40		3,057		1,917	55	5,029
241-40		1	2	279	408	690
242-10,20		5	7	21,713	652	22,377
242-31				207	8	215
-32		4	13	68,469	939	69,425
-41,42,43		2	4	96,560	33,425	129,991
OUTER TOTAL	1	5,064	30	197,259	76,341	278,695
SOUTHERN						
241-11,17		4	2	18,688	38	18,732
-12,16	3	38		7,430	37	7,508
-13,14,15	1	49	149	43,055	10	43,264
-20,30	1	11	1	8,179	1,129	9,071
Seine	5	102	152	77,352	1,214	78,825
Set net	134	23,970	1,089	20,222	2,374	47,789
SOUTHERN TOTAL	139	24,072	1,241	97,574	3,588	126,614
EASTERN[1/]	5		801	2		808
KAMISHAK		1	28	12,568	35,584	48,181
GRAND TOTALS:	145	29,137	2,100	307,403	115,513	454,298

1/ Salmon derby catches from Eastern district - no seine season.

Table 8. 1973 Salmon catch by week, Southern, Outer, and Kamishak districts.

	Southern District			Outer District			Kamishak District		
Week	Pinks	Chums	Reds	Pinks	Chums	Reds	Pinks	Chums	Reds
23	4	19	2,787						
24	6	38	2,302						
25	73	46	1,726						
26	1,157	195	4,729						
27	3,602	236	5,364						
28	22,318	1,262	3,402	21,003	4,800	2,179			
29	8,970	495	1,995	66,197	34,972	2,204			
30	28,872	725	981	75,022	21,529	673			
31	31,820	371	283	33,404	411	4	6,813	986	
32	600	169	73	277	433		4,537	7,681	
33	142	25	12	1,077	10,788	2	641	14,953	
34	13	14					522	7,799	
35							55	4,179	
36									
37									

Table 9. Ground stream surveys, Southern district, 1973.

Stream	Date	Species	Inter-tidal	Stream	Total	Temp	Weather	Remarks
Humpy Creek	7/14	Pinks	--	--	--	--	--	700 off mouth
	7/16	Pinks	--	1	1	--	Overcast/calm	--
	7/30	Pinks	300	6,000	6,300	--	Overcast/wind	11 boats
	8/29	Pinks	1,000	15,610	16,610	--	Clear/calm	--
	10/9	Pinks	710	5	715	--	Clear/calm	--
China Poot	7/16	Pinks	--	22	22	--	clear/calm	--
	8/7	Pinks	550	2,110	2,660	--	clear/calm	--
	8/29	Pinks	1,700	6,040	7,740	--	clear/calm	--
	9/3	Pinks	1,200	1,400	2,660	--	Overcast/calm	--
Tutka	7/17	Pinks	912	1,000	1,912	--	Overcast/calm	plus 1,000 in lagoon
		Chums	27	100	127			
	7/24	Pinks	2,670	300	2,970	47°	clear/calm	--
		Chums	175	50	225			
	8/8	Pinks	2,327	630	2,957	--	clear/calm	--
	8/27	pinks	780	240	1,020	--	overcast/calm	--
Seldovia	7/16	Pinks	200	331	531	--	Overcast/calm	--
		Chums	--	67	67			
	7/18	Pinks	--	1,000	1,000	--	--	--
		Chums	--	200	200			
	7/24	Pinks	4,710	1,520	6,230	46°	clear/calm	--
		Chums	120	150	270			
	7/29	Pinks	7,450	4,000	11,450	--	overcast/calm	--
		Chums	--	350	350	--	overcast/calm	--
	8/8	Pinks	6,550	3,000	9,550	--	clear/wind	--
		Chums	--	--	--			
	8/27	Pinks	1,189	760	1,949	--	overcast/calm	--

Table 9 continued:

Stream	Date	Species	Inter-tidal	Stream	Total	Temp	Weather	Remarks
Port Graham	7/16	Pinks	200	--	200	--	overcast/wind	--
		Chums	150	1,000	1,150			
	7/27	Pinks	130	2,341	2,471	--	--	--
		chums	15	1,855	187			
	8/9	Pinks	--	3,790	3,790	--	--	--
		Chums	--	1,131	1,131			
	8/27	Pinks	--	2,278	2,278	--	overcast/calm	--
		Chums	--	1,467	1,467			

Table 10. Aerial surveys, Southern district, 1973.

Stream	Date	Species	In Bay	In Stream	Weather	Remarks
Fox River	6/28	Reds	--	100	clear/calm	at clearwater slough
	7/2	Reds	--	1,000	--	turning red
	9/19	Coho	--	1,500	overcast/calm	at clearwater slough
Humpy Creek	7/23	Pinks	10,000	2,000	overcast/calm	--
	7/31	Pinks	--	9,200	overcast/calm	7 boats
	8/10	Pinks	3,000	14,000	overcast/wind	PG 81 at mouth
Tutka	7/6	Pinks	1,500	few	clear/wind	--
	7/10	Pinks	1,000	30	overcast/wind	4 schools in Lagoon
Seldovia	7/6	Pinks	--	5,100	clear/wind	5,000 intertidal included
	7/10	Pinks	2,000	30	overcast/wind	--
	7/14	Pinks	--	100	overcast/wind	--
Port Graham	7/6	Chums	--	200	clear/wind	--
	7/10	Chums	--	350	overcast/wind	--
	7/18	Pinks/Chums	--	3,000	overcast/calm	--
	7/31	Pinks/Chums	500	6,000	overcast/calm	--
	8/4	Pinks/Chums	--	4,700	overcast/wind	--
	8/7	Pinks/Chums	--	2,500	overcast/wind	--
	8/10	Pinks/Chums	--	6,350	overcast/wind	--
English Bay (going upstream)	8/4	Reds	--	--	overcast/wind	--
Lake 1				100		
Stream				250		
Lake 2				350		
Stream				150		
Lake 3				1,000		
Lake 4				0		
Stream				50		
Total (for English Bay)				1,900		

Table 11. Ground stream surveys, Outer district, 1973.

Stream	Date	Species	Inter-tidal	Stream	Total	Temp	Weather	Remarks
Dogfish (left)	7/20	Chums	--	155	155	48°	overcast/calm	--
	7/27	Chums	20	168	188	--	overcast/calm	--
	8/9	Chums	--	155	155	--	overcast/wind	--
		Pinks	--	40	40	--	overcast/wind	--
Dogfish (right)	7/20	Chums	--	105	105	--	overcast/calm	3000 chums, upper ba
		Pinks	--	35	35	--		
	7/27	Chums	341	71	412	--	overcast/calm	--
		Pinks	50	200	250			
	8/9	Chums	310	167	477	--	overcast/wind	--
		Pinks	310	166	476			
Port Chatham	7/19	Chums	25	73	98	--	clear/wind	--
		Pinks	600	40	640			
	7/27	Chums	--	120	120	--	light rain	--
		Pinks	--	550	550	--		
	8/3	Chums	--	186	186	--	clear/calm	--
		Pinks	292	750	1042			
	8/14	Chums	--	195	195	--	clear/wind	--
		Pinks	260	2912	3172			
Windy (left)	7/17	Pinks	3950	500	4450	48°	clear/calm	--
		Chums	50	186	236			
	8/1	Pinks	3000	7000	10,000	--	overcast/calm	--
		Chums	--	710	710			
	8/18	Pinks	500	6520	7020	--	clear/wind	--
		Chums	--	237	237	--		
Windy (right)	7/17	Pinks	1400	51	1451	48°	overcast/calm	--
		Chums	100	125	225			
	8/1	Pinks	680	3270	3950	--	overcast/calm	--
		Chums	60	300	360			
	8/18	Pinks	--	1900	1900	--	clear/wind	--
		Chums	--	--	--			
Rocky	8/2	Pinks	--	750	750	--	overcast/calm	--
		Chums	45	800	845			

Table 11 continued:

Stream	Date	Species	Inter-tidal	Stream	Total	Temp	Weather	Remarks
Port Dick	7/18	Pinks	2600	--	--	43°	clear/wind	577 pinks; 449 chums through weir
		Chums	3500	--	--			
	7/23	Pinks	4050	--	--	43°	overcast/wind	1339 pinks;544 chums through weir
		Chums	4300	--	--			
	7/28	Pinks	6040	--	--	43°	clear/wind	--
		Chums	3750	--	--	43°	clear/wind	--
	8/10	Pinks	3000	--	--	44°	clear/wind	--
		Chums	3000	--	--			
	8/20	Pinks	5700	--	--	44°	clear/calm	--
		Chums	4300	--	--			
	8/30	Pinks	3450	--	--	44°	overcast/wind	--
		Chums	2790	--	--			
Right Hand	8/10	Pinks	150	25	175	42°	clear/wind	--
		Chums	230	20	250			
	8/16	Pinks	87	14	101	42°	clear/wind	--
		Chums	63	11	74			
Middle Creek	7/8	Pinks	--	--	--	43°	overcast/wind	--
		Chums	29	--	29			
	7/14	Pinks	20	8	28	43°	overcast/wind	--
		Chums	217	53	270			
(far left)	7/19	Pinks	--	--	--	47°	clear/calm	--
		Chums	--	556	556			
	7/19	Pinks	181	157	338	43°	clear/wind	--
		Chums	323	233	556			
	7/27	Pinks	131	169	300	44°	clear/calm	--
		Chums	253	347	600			
	8/7	Pinks	--	--	297	43°	clear/wind	--
		Chums	--	--	553			
	8/15	Pinks	197	3	200	43°	heavy rain	--
		Chums	503	18	521			
	8/23	Pinks	177	9	186	43°	overcast/wind	--
		Chums	466	7	573			
Island Creek	7/8	Chums	55	15	70	43°	overcast/wind	--
	7/14	Chums	362	25	387	43°	overcast/wind	--
	7/19	Chums	230	560	790	47°	clear/calm	--

Table 11 continued:

Stream	Date	Species	Inter-tidal	Stream	Total	Temp	Weather	Remarks
	7/27	Chums	600	3520	4120	43	clear/calm	--
	8/11	Chums	4000	4200	8200	--	--	--
	8/20	Chums	5000	5500	10,500	43	--	--
South Nuka	7/18	Pinks	900	--	900	--	clear/calm	--
		Chums	450	--	450			

Table 12. Aerial Surveys, Outer district, 1973.

Stream	Date	Species	In Bay	In Stream(s)	Weather	Remarks
Dogfish	7/14	Chums	500	--	overcast/wind	in upper lagoon
	7/18	Chums	--	80	overcast/calm	--
	7/31	Chums	2,500	500	overcast/calm	--
	8/1	Chums	2,500	600	overcast/calm	--
	8/7	Chums	600	750	overcast/wind	--
	8/10	Chums	--	1,150	overcast/wind	--
Port Chatham	7/6	Chums	2,500	--	clear/calm	outside of spit
	7/14	Chums	5,000	--	overcast/wind	half inside spit
	7/27	Pinks	8,000	--	overcast/wind	outside spit
	7/31	Pinks/Chums	16,000	850	overcast/calm	--
	8/1	Pinks/Chums	10,000	1,300	clear/calm	--
	8/7	Pinks	3,800	400	overcast/wind	--
	8/10	Pinks	2,700	1,500	overcast/wind	--
Windy Bay	7/6	Pinks	5,500	--	clear/calm	--
	7/10	Pinks	--	200	overcast/wind	Windy left
	7/14	Pinks	3,000	200	overcast/wind	--
	7/18	Pinks	5,000	100	overcast/calm	--
	7/20	Pinks	8,000	800	overcast/calm	--
	7/31	Pinks	5,000	2,000	overcast/calm	5 boats; 1 tender
	8/2	Pinks	2,000	13,000	clear/calm	--
Rocky River	7/20	Pinks	1,000	200	overcast/calm	--
		Chums	--	130		
	7/31	Pinks	1,000	1,670	overcast/calm	--
	8/2	Pinks/Chums	1,000	1,500	clear/calm	--
	8/7	Pinks/Chums	200	950	overcast/wind	--
South Nuka	7/6	Pinks	2,000	--	overcast/calm	--
	7/14	Pinks	2,000	1,000	overcast/wind	--
	7/20	Pinks	4,000	2,000	overcast/calm	--
	7/24	Pinks	--	11,000	overcast/wind	--
	7/31	Pinks	3,000	8,500	overcast/calm	--
	8/8	Pinks	50	8,000	clear/wind	--

Table 12 continued:

Stream	Date	Species	In Bay	In Stream(s)	Weather	Remarks
Petrof	7/20	Chums	--	100	overcast/calm	--
	7/24	Chums	--	1,000	overcast/calm	--
	7/31	Chums	1,000	730	overcast/calm	--
	8/8	Chums	--	5,000	clear/wind	--
Port Dick	6/28	Chums	400	--	clear/wind	--
	7/10	Chums	1,500	--	overcast/wind	--
	7/20	Pinks	20,000	--	overcast/calm	on southside
	7/31	Chums/Pinks	40,000	--	--	--
	8/2	Chums	5,000	--	clear/calm	--
		Pinks	40,000	--		
	8/8	Pinks	20,000	--	clear/wind	--
Head Stream	6/28	Chums	--	70	overcast/calm	--
	7/2	Chums	--	1,200	clear/wind	--
	7/10	Chums	--	650	overcast/wind	--
	7/14	Chums	--	2,350	overcast/wind	--
	7/18	Chums	--	3,500	overcast/calm	--
		Pinks	--	1,600		
	7/20	Pinks	--	2,500	overcast/calm	--
	8/8	Pinks	--	5,000	clear/wind	--
Rt. Hand	7/14	Chums	--	200	overcast/wind	--
	7/18	Chums/Pinks	--	100	overcast/calm	--
	7/18	Chums/Pinks	--	150	overcast/calm	--
	7/20	Chums/Pinks	--	200	--	--
	8/10	Pinks	--	100	overcast/wind	--
Middle Creek	7/14	Chums	--	400	overcast/wind	--
	7/18	Chums	--	500	overcast/calm	--
	7/20	Chums/Pinks	--	500	overcast/calm	--
	7/31	Chums/Pinks	--	400	--	--
	8/8	Chums/Pinks	--	350	clear/wind	--
	8/10	Chums/Pinks	--	600	overcast/wind	--
Island Creek	7/14	Chums	--	300	overcast/wind	--
	7/18	Chums	--	1,000	overcast/calm	--

Table 12 continued:

Stream	Date	Species	In Bay	In Stream(s)	Weather	Remarks
Island Creek	7/20	Chums	--	1,500	overcast/calm	--
	7/31	Chums	--	4,000	--	--
	8/8	Chums	--	4,500	clear/wind	--
	8/10	Chums	--	4,000	overcast/wind	--
Desire	6/28	Reds	600	50	clear/windy	--
	7/7	Reds	5,000	2,500	overcast/calm	middle of lake
	7/24	Reds	--	2,020	overcast/wind	--
	7/31	Reds	--	5,200	overcast/calm	--
	8/8	Reds	--	7,550	clear/wind	--
Delight	6/28	Reds	some	600	clear/windy	--
	7/2	Reds	--	450	clear/windy	includes 350 in lake
	7/7	Reds	--	300	overcast/wind	west shore line
	7/24	Reds	--	250	overcast/wind	plus 200 pinks in stream
	7/31	Reds	--	2,500	overcast/calm	--
	8/8	Reds	--	3,000	clear/wind	--
James Lagoon	8/8	Chums	--	200	clear/wind	--
Aialik	6/28	Reds	--	--	overcast/wind	jumpers in lagoon
	7/2	Reds	--	1,500	--	--

The 97,574 harvest is not an impressive catch for a dominant year. Over 99% of the red salmon catch of 24,072 was taken by set nets. This was the fifth largest catch since 1954 and contributed 19% of the total for 1973. The red catch averages 8.2% of the total Southern district catch over the twenty year period. The coho catch of 1,241 was about 1/3 of the average. The chum catch of 3,588 was far below the twenty-year average of 22,105.

The set net season started on a calendar opening, June 4. Two 48-hour periods per week were fished. Since 1971 seine openings have been regulated by field announcement after individual runs have been built up to allow escapement. The initial seine opening in 1973 was a 24-hour opening on July 13 in the outer portion of the district. On July 14 Port Graham bay was open to two 48-hour periods per week for seining. On July 19 the entire Southern district west of Glacier Spit was open for one 24-hour period for seines. On July 26 the entire Southern district was open for two 48-hour periods per week. A portion (east of Glacier Spit) was closed on August 6 and reopened on August 13.

The overall pink salmon escapement was fair with a total of 71.5 thousand fish for the four main study streams compared to a total 12-year total average escapement of 97.0 thousand. Humpy Creek had an escapement of 31.1 thousand; Tutka 6.5 thousand; Seldovia 14.5 thousand and Port Graham 7.0 thousand. (Appendix Table 15)

Kamishak District:

The total 1973 Kamishak district salmon catch of 48,181 approached the twenty-year average of 57,293. The catch by species since 1954 appears in Appendix Table 18.

The first opening in the Kamishak district was on July 19 and opened the area south of Tignagvik Point. On July 26 the area between Tignagvik Point and Ursus Head was opened and on August 7 all waters north of Ursus Head were open. All openings were for seven days a week fishing.

Escapement survey results are shown in Appendix Table 16.

Outer District:

The total salmon catch for the Outer district in 1972 was 278,695 fish, the eleventh greatest catch since 1954; a median catch which was approximately 70% of the average annual catch of 400,638 salmon for the 20 year period. The pink salmon catch of 197,239 was the tenth greatest and was 62% of the annual average of 314,142 pinks. The chum salmon catch of 76,341 approached the annual average of 81,433 fish. The red salmon catch of 5,064 was slightly above the average of 4,767 salmon.

The Outer district is regulated by field announcement. The entire Outer district except for Rocky Bay and the south side of Port Dick was open for one 24-hour period on July 13 and was opened for two 48-hour periods each week on July 16. On July 23 Port Chatham and Nuka Island were closed and the south side of Port Dick was opened. On July 30 the north side of Port Dick was closed. All waters in the outer west arm of Port Dick were open on August 13.

Eastern District:

The commercial salmon season was not opened in the Eastern district in 1973. However, 808 total fish were caught in the annual silver salmon derby and these are recorded as commercially caught salmon. Annual catches are shown on Appendix Table 20.

HERRING

Ninety-nine percent of the Cook Inlet herring catch of 3,184,287 pounds was taken by purse seiners in the Southern, Kamishak, Outer and Eastern districts. The balance was taken by set gill net fishermen in the Central district. The catch was taken in May and June for roe. This catch was the second greatest for the past five years. (Appendix Table 21)

Biological data will be presented in a later data report.

HALIBUT

The halibut fishery is regulated by the International Pacific Halibut Commission. Each halibut management area overlaps and includes several state management areas and catch records from discrete state management areas (Cook Inlet, Kodiak, etc.) are not available.

Halibut are caught in every district of Cook Inlet covered by this report. (Southern, Kamishak, Barren Islands, Outer and Eastern) Records of halibut landings delivered to Cook Inlet processors are maintained. The 1973 season opened on May 10 and closed on October 1 in area 3A with total deliveries of 4.2 million pounds of halibut.

MISCELLANEOUS FINFISH

Various finfish species comprise a small but important part of Cook Inlet commercial fishing activity. These species will become more important as markets develop and demand increases. The primary producing areas at present are the Eastern and Outer districts and adjacent Gulf of Alaska waters.

In 1973, 23,168 pounds of cod (Gadus), 11,074 pounds of rockfish (Sebastodes), and 421 pounds of sculpin or bullheads (Cottidae) were

recorded as being landed. In addition 26,430 pounds of ling cod (Ophiodon) was recorded as being taken in pots and 24,303 pounds taken on long line gear.

FINFISH SUBSISTENCE

The most popular finfishes for subsistence utilization are the salmon. An area wide permit is required with a 50 salmon limit for each permittee. Only Alaskan residents are allowed to subsistence fish for salmon. Each permittee is required to file a catch report after the season. In general, salmon may be taken for subsistence in conformance with open commercial fishing periods with equivalent gear to that used in the commercial fishery. Calendar date openings are also used for regulation of the subsistence salmon fishery. Records are kept area wide and total catches are given in the overall Cook Inlet report. Of the five districts covered by this report only the Southern and Eastern districts have bonifide subsistence fisheries for salmon. Subsistence catches by species for 1972 are given in Table 13.

Herring, smelt, halibut and incidental catches of miscellaneous finfish are also utilized for subsistence.

Table 13. 1973 Cook Inlet salmon subsistence catch.

Location	Catch by Species							Total Permits Issued	Returned	Did Not Fish	Fished Caught None	Caught 50 or Less	Caught 50 or More
	Kings	Reds	Cohos	Pinks	Chums	Other	Total						
Fire Island	0	2	54	0	20	0	76		5	0	0	5	0
Big Susitna	0	22	50	3	17	0	92		11	4	2	5	0
Total Northern District	0	24	104	3	37	0	168	19	17	4	2	10	0
Salamatof Beach	0	11	68	4	0	0	83		36	24	9	8	0
Ninilchik	0	0	144	5	0	4	153		27	10	0	17	0
Kalifonski	0	0	16	0	0	0	16		10	5	0	5	0
Total Central District	0	11	228	9	0	4	252	104	73	49	9	30	0
Mud Bay	0	17	1164	52	37	8	1278		101	35	5	60	4
South Shore	0	1	132	26	3	1	163		19	8	3	9	0
Anchor Point	0	0	8	6	0	0	14		6	3	3	0	0
Total Southern District	0	18	1304	84	40	9	1455	143	128	46	11	69	4
TOTAL COOK INLET:	0	53	1636	96	77	13	1875	266	221	99	22	109	4

Appendix

Table 1. Shrimp landings in pounds, Cook Inlet, 1960-1973.

Year	Trawl	Pot	Total
1960			711,355
1961			1,045,170
1962			532,291
1963	1,897,580		1,897,580
1964	599,665	1,746	601,411
1965	82,280		82,280
1966	285,976	23,383	309,359
1967	741,438		741,438
1968	25,681	1,067	26,748
1969	1,847,071	131	1,847,202
1970	5,808,160	9,473	5,817,633
1971	5,395,116	53,462	5,448,578
1972	5,377,181	171,386	5,548,567
1973	4,549,804	327,000	4,876,804

Appendix Table 2
Shrimp trawl landings in pounds, Cook Inlet, 1969-1973.

Year	Catch*	Landings	Vessels
1969	1,847,071	284	2
1970	5,808,160	523	3
1971	5,395,116	567	4
1972	5,377,181	450	9
1973	4,549,804	338	10

* Almost all from Kachemak Bay.

Appendix Table 3. Mean monthly catch per unit of effort (CPUE), trawl shrimp, Kachemak Bay, July 1969-Sept. 1973.

Month	Ave. Pounds Landed Per Hour Trawled
January	3,619
February	3,105
March	5,376
April	2,557
May	2,454
June	2,178
July	2,254
August	2,950*
September	3,954
October	2,663
November	2,820
December	2,136
MEAN	3,005

*preliminary

Appendix Table 4
Cook Inlet pot shrimp landings, in pounds, 1970-1973.

Year	Pounds	Landings	Vessels
1970	9,473	33	8
1971	53,462	187	11
1972	171,386	361	17
1973	327,000	761	41

Appendix Table 5. Cook Inlet king crab catch in pounds, by district, 1951-1973.

Year	Southern	Kamishak	Barren Is.[1/]	Outer	Eastern	Total
1951	6,619					6,619
1952	2,900					2,900
1953	1,359,854					1,359,854
1954	1,275,852					1,275,852
1955	1,915,821					1,915,821
1956	2,129,035					2,129,035
1957	620,858					620,858
1958	752,990					752,990
1959	2,191,437					2,191,437
1960	4,219,776			67,656		4,287,432
1961	2,988,880	1,205,679		61,837		4,256,396
1962	1,968,980	4,305,444		577,197		6,851,621
1963	2,667,279	5,538,349		175,535		8,381,163
1964	1,760,660	4,967,824		43,908		6,772,392
1965	1,813,135	963,412				2,776,547
1966	1,887,948	1,974,559		37,656		3,900,163
1967	1,286,789	1,821,269		16,033	418	3,124,509
1968	1,004,683	2,965,658		39,112		4,009,453
1969	1,299,527	1,422,052		130,928		2,852,507
1970	1,495,759	2,237,259		149,784		3,882,802
1971	1,237,802	2,538,947		380,890		4,157,639
1972	1,900,005	2,445,825		261,706	361	4,607,878
1973	2,091,000	1,918,920	375,203	3,738		4,388,861

[1/] Barren Islands district established in Spring, 1973.

Appendix Table 6
Cook Inlet king crab landings
1960 - 1973

Southern

Year	Landings	Crab[1/]	Crab Per Landing
1960	2,434	455,000	187
1961	2,619	364,045	139
1962	1,843	296,123	160
1963	1,435	347,096	241
1964	1,019	229,165	225
1965	742	217,544	293
1966	681	226,557	332
1967	705	164,335	233
1968	659	128,720	195
1969	681	196,350	288
1970	700	206,471	295
1971	857	153,856	179
1972	1,011	238,092	236
1973	1,088	275,132	253

Kamishak

1960		-- NONE --	
1961	181	140,566	776
1962	372	473,601	1,273
1963	445	635,225	1,427
1964	401	589,796	1,470
1965	79	108,019	1,367
1966	121	225,537	1,863
1967	99	213,285	2,154
1968	177	331,439	1,873
1969	66	178,825	2,709
1970	106	276,807	2,611
1971	134	352,968	2,634
1972	119	325,265	2,733
1973	125	252,489	2,020

[1/] Calculated from fish ticket weights.

Appendix Table 7
Cook Inlet king crab catch and value of product,
1951 - 1973

Year	Pounds crab	Boats	Value to Fishermen[1/]	1st Wholesale Value[2/]
1951	6,619		$ 7,000	Not available
1952	2,900		3,000	"
1953	1,359,854	12	136,000	"
1954	1,275,852	7	127,000	"
1955	1,915,821	12	191,000	"
1956	2,129,035	12	213,000	"
1957	620,858	5	62,000	"
1958	752,990	5	75,000	"
1959	2,191,437	25	219,000	"
1960	4,287,432	60	422,000	"
1961	4,256,396	71	419,000	$ 890,000
1962	6,851,621	70	685,000	1,550,000
1963	8,381,163	50	838,000	2,010,000
1964	6,772,392	46	677,000	1,770,000
1965	2,776,547	23	278,000	720,000
1966	3,900,163	33	390,000	1,340,000
1967	3,124,509	34	322,000	1,250,000
1968	4,008,933	44	1,000,000	2,930,000
1969	2,857,170	29	700,000	2,300,000
1970	3,882,802	41	1,000,000	3,250,000
1971	4,157,639	42	1,247,292	Not available
1972	4,607,878	43	1,600,000	3,900,000
1973	4,388,861	63	3,700,000	7,000,000

[1/] Values are estimates based on price per pound paid to fishermen, rounded to nearest thousand.

[2/] Based on annual reports from fish processors, rounded to nearest 10 thousand.

Appendix Table 8
Comparative measurements of king crab carapace lengths,
winter and summer crab, Cook Inlet

Winter Fishery

Carapace Size Range	Kamishak 1963	1970	1971	1973	Southern 1963	1970	1971	1972	1973	1974
140 to 159 mm	14%	20%	18%	34%	21%	33%	20%	11%	31%	35%
160 to 179 mm	62%	54%	60%	50%	52%	56%	68%	69%	52%	55%
180 to 200 mm+	23%	27%	22%	16%	27%	11%	12%	20%	17%	10%

Summer Fishery

Carapace Size Range	Kamishak 1963	1970	1971	1972	1973	Southern 1963	1970	1971	1972	1973
140 to 159 mm	46%	59%	34%	43%	67%	69%	65%	40%	56%	60%
160 to 179 mm	43%	33%	56%	45%	31%	28%	34%	52%	38%	34%
180 to 200 mm+	11%	8%	10%	12%	2%	3%	1%	8%	6%	6%

Appendix Table 9
Tanner crab landings, by month, in pounds, Cook Inlet, 1968 - 1973.

Month	1968	1969	1970	1971	1972	1973
January	----	39,251	61,394	29,561	169,088	236,609
February	6,284	144,556	155,370	113,116	163,554	881,302
March	8,613	295,993	262,990	228,196	1,053,548	1,536,267
April	45,200	474,234	413,991	365,900	732,614	1,769,927
May	80,420	161,978	363,035	406,973	1,019,085	1,554,901
June	5,420	288,752	21,824	431,472	911,787	1,332,587
July	----	41,950	----	271,949	172,460	---
August	340	----	----	----	1,688	---
September	490	----	----	728	3,226	---
October	1,570	10,308	1,304	930	25,852	---
November	1,514	----	835	78,704	258,585	861,837
December	15,296	11,783	15,797	189,320	296,346	336,189
YEAR TOTALS	165,147	1,468,805	1,333,889	2,116,849	4,807,843	8,509,619
No. Landings	152	538	314	613	1,098	1,555
No. Vessels	25	24	25	40	43	80
Average Wt.	3.1	3.1	2.9	2.4	2.5	2.6

Appendix Table 10 Cook Inlet Dungeness crab catch - 1966-1973.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1966	-0-	-0-	-0-	-0-	3,607	6,150	-0-	48,345	69,875	-0-	-0-	-0-	127,977
1967	-0-	-0-	-0-	-0-	1,776	1,471	-0-	-0-	90	3,831	-0-	-0-	7,168
1968	-0-	-0-	-0-	-0-	137	-0-	84,480	181,459	118,365	66,841	30,482	-0-	481,764
1969	-0-	-0-	335	786	1,608	3,987	13,898	14,876	13,011	-0-	-0-	-0-	48,501
1970	-0-	-0-	115	-0-	-0-	7,889	15,009	36,371	95,555	52,265	1,373	-0-	208,577
1971	-0-	-0-	-0-	-0-	1,745	11,271	21,818	17,049	20,287	15,951	7,221	1,504	96,846
1972	60	1,620	36	-0-	-0-	1,715	6,081	3,568	5,085	4,517	7,031	9,662	38,930
1973	3,727	703	158	4,032	12,383	12,742	7,861	8,224	36,069	147,502	68,243	8,404	310,048

Appendix

Table 11 Cook Inlet dungeness crab catch, 196 -1973.

Year	Crab	Pounds
1961		191,588
1962	204,573	460,725
1963		1,677,204
1964	177,708	421,452
1965	32,378	82,280
1966	45,625	127,977
1967	2,141	7,168
1968		481,764
1969		48,501
1970	84,686	208,577
1971	35,387	96,846
1972		38,930
1973	111,853	310,048

Appendix Table 12
Salmon catches by district; lower Cook Inlet-Resurrection Bay, 1954-1973

Year	Species	District Southern	Kamishak	Outer	Eastern	Totals (10^{-3})
1954	Kings	1,532		13		1.6
	Reds	22,913		4,927	11,786	39.6
	Cohos	12,235	no fishery	369	2,556	15.2
	Pinks	180,977		82,205	7,562	270.7
	Chums	150,769		112,877	1,945	265.6
	TOTAL	368,426	0	200,391	23,849	592.7
1955	Kings	562	0	7	4	0.6
	Reds	30,848	2	701	5,049	36.6
	Cohos	3,230	8	277	6,160	9.7
	Pinks	565,216	5,121	557,997	55,994	1,184.3
	Chums	24,398	278	40,887	3,147	68.7
	TOTAL	624,254	5,409	599,869	70,354	1,299.9
1956	Kings	310	0	23	0	0.3
	Reds	33,054	67	2,889	296	36.3
	Cohos	4,693,	701	190	3,761	9.4
	Pinks	150,486	193	42,368	14,873	207.9
	Chums	53,515	14,936	19,248	519	88.2
	TOTAL	242,058	15,897	64,718	19,449	342.1
1957	Kings	286	0	13	120	0.4
	Reds	19,431	4,335	2,982	169	26.9
	Cohos	1,507	29	110	119	1.8
	Pinks	130,511	5,905	149,197	0	285.6
	Chums	57,403	10,856	138,171	20	206.5
	TOTAL	209,138	21,125	290,473	428	521.2

Appendix Table 12 continued:

Year	Species	District Southern	Kamishak	Outer	Eastern	Totals (10^{-3})
1958	Kings	119		1	0	0.1
	Reds	17,731		1,719	0	19.4
	Cohos	1,713	no fishery	83	0	1.8
	Pinks	209,798		739,768	200	949.8
	Chums	24,096		100,386	0	124.5
	TOTAL	253,457	0	841,957	200	1,095.6
1959	Kings	74	0	3	58	0.1
	Reds	10,026	1,549	10,365	5,477	27.4
	Cohos	709	43	109	8,954	9.8
	Pinks	50,076	5,325	68,875	125	124.4
	Chums	15,278	25,759	65,675	14,612	121.3
	TOTAL	76,163	32,676	145,027	29,226	283.0
1960	Kings	12	11	4	0	0.0
	Reds	12,292	768	1,336	105	14.5
	Cohos	1,237	28	533	853	2.7
	Pinks	250,818	11,563	328,501	8,720	599.6
	Chums	4,100	44,328	67,187	467	116.1
	TOTAL	268,459	56,698	397,561	10,145	732.9
1961	Kings	39	0	2		0.0
	Reds	10,180	1	12,595		22.8
	Cohos	1,161	14	444	no fishery	1.6
	Pinks	191,911	6,019	105,447		303.4
	Chums	2,924	12,465	40,204		55.6
	TOTAL	206,215	18,499	158,692	0	383.4

Appendix Table 12 continued:

Year	Species	District: Southern	Kamishak	Outer	Eastern	Totals (10^{-3})
1962	Kings	58	0	2	0	0.1
	Reds	16,569	20	8,697	0	25.3
	Cohos	2,095	11	1,893	3,728	7.7
	Pinks	564,050	219	1,684,023	49	2,248.3
	Chums	9,089	6,058	126,750	10	141.9
	TOTAL	591,861	6,308	1,821,365	3,787	2,423.3
1963	Kings	88	1	6	1	0.1
	Reds	13,142	4	1,974	1	15.1
	Cohos	4,020	97	369	2,250	6.8
	Pinks	99,829	82,314	21,462	11	203.6
	Chums	7,695	13,892	116,923	0	138.5
	TOTAL	124,774	96,308	140,734	2,263	364.1
1964	Kings	84	5	2	0	0.1
	Reds	17,283	1,979	1,370	22	20.7
	Cohos	8,905	115	431	22	9.5
	Pinks	266,489	20,719	767,396	813	1,055.4
	Chums	11,529	42,280	269,512	12	323.3
	TOTAL	304,290	65,098	1,038,711	869	1,409.0
1965	Kings	10	0	0		0.0
	Reds	11,229	808	1,965		14.0
	Cohos	733	4	7	no fishery	0.8
	Pinks	90,330	3,452	21,816		115.6
	Chums	2,459	2,706	22,443		27.6
	TOTAL	104,761	6,970	46,231	0	158.0

Appendix Table 12 continued:

Year	Species	District: Southern	Kamishak	Outer	Eastern	Totals (10^{-3})
1966	Kings	60	0	1		0.1
	Reds	12,192	21	2,710		14.9
	Cohos	4,535	247	357	no fishery	5.1
	Pinks	177,544	2,945	398,751		579.2
	Chums	28,754	12,688	87,620		129.1
	TOTAL	223,085	15,901	489,439	0	728.4
1967	Kings	173	1	2	0	0.2
	Reds	26,350	182	2,165	348	29.1
	Cohos	2,393	74	56	203	2.7
	Pinks	95,100	17,340	259,951	3,097	375.5
	Chums	23,416	24,221	37,533	275	85.4
	TOTAL	147,432	41,818	299,707	3,923	492.9
1968	Kings	61	0	1	2	0.1
	Reds	18,716	492	1,550	74,484	95.3
	Cohos	4,671	101	106	5	4.9
	Pinks	154,033	198,253	191,691	41,464	585.4
	Chums	4,518	49,461	20,283	872	75.1
	TOTAL	181,999	248,307	213,631	116,827	760.8
1969	Kings	59	2	0	3	0.1
	Reds	12,578	10,723	92	99,403	122.8
	Cohos	485	121	11	6	0.6
	Pinks	70,753	80,157	51,533	1	202.4
	Chums	2,600	53,193	5,400	10	61.2
	TOTAL	86,475	144,196	57,036	99,423	387.1

Appendix Table 12 continued:

Year	Species	District Southern	Kamishak	Outer	Eastern	Totals (10^{-3})
1970	Kings	91	0	5	11	0.1
	Reds	12,245	2,888	4,177	1,767	21.1
	Cohos	3,705	220	243	692	4.8
	Pinks	208,174	23,583	302,879	40,227	574.9
	Chums	8,174	95,857	118,746	633	223.4
	TOTAL	232,389	122,548	426,050	43,330	824.3
1971	Kings	41	0	11	21	0.1
	Reds	18,403	3	1,630	2,198	22.2
	Cohos	3,151	121	174	1,115	4.6
	Pinks	50,066	32,094	310,710	1	392.9
	Chums	2,857	26,327	118,995	423	148.6
	TOTAL	74,518	58,545	431,520	3,758	568.4
1972	Kings	69	0	7	12	0.1
	Reds	31,345	47	26,423	82	57.9
	Cohos	1,283	31	17	903	2.2
	Pinks	9,126	342	1,005	18,190	28.7
	Chums	4,936	26,374	43,490	743	75.5
	TOTAL	46,759	26,794	70,942	19,930	164.4
1973	Kings	139	0	1	5	0.2
	Reds	24,072	1	5,064	0	29.1
	Cohos	1,241	28	30	801	2.1
	Pinks	97,574	12,568	197,259	2	307.4
	Chums	3,588	35,584	76,341	0	155.5
	TOTAL	126,614	48,181	278,695	808	454.3

Appendix

Table 13. Pink salmon catches by bay during even years, 1962 - 1972.[1/] (Catches in thousands of fish.)

Catch location	1962	1964	1966	1968	1970	1972
Upper Kachemak	110	83	42	46	114	3
Tutka	291	101	54	29	45	5
Seldovia	145	44	59	56	29	0.2
Port Graham	10	36	7	19	11	0.9
Dogfish	0.3	0.1	13	0.1	10	0.3
Port Chatham	102	67	7	10	2	
Windy	85	69	25	3	1	
Rocky	226	53		11	37	
Port Dick	1,118	526	297[2/]	55	192	
Nuka	130	24	113	90	48	
Total	2,217.3	1,003.1	617	319	489	9.4

1/ Source-IBM statistical runs.

2/ Includes 75,600 pinks which were caught and dumped due to lack of tender service and were not entered on fish tickets.

Appendix

Table 14. Pink salmon catches by bay during odd years, 1961 - 1973.[1/] (catches in thousands of fish.)

Catch location	1961	1963	1965	1967	1969	1971	1973[2/]
Upper Kachemak	68	58	14	40	1	11	43*
Tutka	107	38	6	36	37	10	7*
Seldovia	16	2	19	12	31	27	19*
Port Graham	1	2	10	4	2	1	8*
Dogfish	-0.1	-0.1	-0.1	2	0	60	0.3
Port Chatham	0	1	0	0	0	26	22
Windy	2	0	5.4	0	0	57	68
Rocky	0	1.4	0.1	0	0	0.1	0.2
Port Dick	93	19	15	260	52	95	97
Nuka	2	.2	-0.1	-0.1	0	120	8
Total	289	121.7	69.7	354.1	123	407.1	272.5

1/ Source-IBM statistical runs.
2/ Source-Homer office statistics. *Seine only. Set net these areas total 20,481.

Appendix Table 15
Cook Inlet Southern and Outer districts
estimated pink salmon escapements in thousands of fish.[2/]

Stream	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	12 year Average
Humpy	56.0	34.7	18.5	28.0	30.0	25.0	24.7	5.4	55.2	45.0	13.8	36.9	31.3
Tutka	30.0	10.0	20.0	20.0	12.0	7.0	7.9	6.5	6.5	16.7	1.5	6.5	12.0
Seldovia	50.0	15.0	60.0	30.0	86.0	55.0	53.2	60.0	23.0	31.1	5.8	14.5	40.3
Pt. Graham	50.0	2.0	16.0	1.5	24.0	2.0	24.4	4.0	16.6	13.2	2.4	7.0	13.6
Windy L.	12.5	4.5	7.7	10.0	7.0	6.0	6.9	23.0	13.0	35.4	.4	12.9	11.6
Windy R.	12.5	4.9	6.2	2.0	7.0	6.0	2.8	3.2	2.1	13.0	.1	4.6	5.3
Rocky	200.0	12.0	80.0	.3	44.0	1.0	43.1	1.0	32.0	1.6	8.1	2.0	32.5
Pt. Dick	40.0	16.0	31.5	50.0	35.0	20.0	29.0	12.0	34.5	97.8	10.0	26.4	33.6
Island	15.0	3.6	30.0	.5	7.0	.5	4.3	.1	5.5	.1	1.7	.5	5.7
TOTAL[3/]	466	103	270	142	252	123	196	115	190	254	44	111	119

1/ Weir count.

2/ Escapement estimates were derived from peak counts or calculated from counts made throughout the spawning season. When series counts were available the total fish/days was divided by average stream life (2.5 weeks) to estimate total escapement.

3/ Rounded to nearest thousand.

Appendix Table 16.
Aerial stream surveys - North Head - Kamishak Bay District
1965 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/30/65	---	---	400	Pinks	Clear	---
			125	Chums		
8/7/65	1,500	Pinks	400	Chums	---	Lagoon
8/ /66	---	---	4,500	Pinks	---	---
8/3/70	---	---	7,500	Pinks	---	Intertidal stream, 2 pools 300 above.
7/15/71	---	---	0	---	Clear/calm	---
8/9/71	---	---	100	Pinks	Clear/calm	---
8/16/71	---	---	5,000	Pinks	---	---
8/3/72	---	---	800	Pinks	Overcast/calm	---
8/17/72	---	---	900	Chums	Clear/windy	700 above falls, 200 below.
8/16/73	---	---	530	Pinks	Clear/calm	10 Reds

Appendix Table 16 continued:

Aerial stream surveys - Cottonwood - Kamishak Bay District
1965 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/30/65	---	---	150	Chums	---	---
8/7/65	---	---	445	Chums	---	---
8/ /66	Several Thousand	Chums	---	---	---	---
8/25/66	---	---	11,500	Pinks	Clear	Hi tide.
7/25/68	---	---	---	---	---	Few chums moving in.
8/2/68	5,000	Chums	---	---	---	---
8/11/69	---	---	1,000	Pinks	---	---
8/3/70	---	---	550	Chums	---	Head end stream.
8/9/71	---	---	3	Chums	Overcast/calm	---
8/16/71	---	---	2,000	Chums	Overcast/calm	---
9/3/71	---	---	8,000	Chums	Overcast/calm	Many dead salmon
8/3/72	---	---	300	Chums	Overcast/calm	---
8/7/72	---	---	1,200	Chums	---	---
8/17/72	---	---	3,100	Chums	---	---
7/17/73	---	---	---	---	Overcast/calm	---
8/4/73	---	---	500	Chums	overcast/wind	right stream
8/6/73	---	---	1,000	Chums	Overcast/calm	---
8/16/73	---	---	2,600	Chums	Clear/calm	---

Appendix Table 16 continued:

Aerial stream surveys - Iniskin - Kamishak Bay District
1965 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/30/65	---	---	33	Chums	Clear	---
8/7/65	---	---	670	Chums	---	---
7/28/66	---	---	20	Pinks	Windy	3/4 miles up Head End Stream
8/25/66	---	---	25,000	Pinks	Clear	---
7/25/68	---	---	---	---	---	Few chums moving in.
8/2/68	---	---	5,000	Chums	---	Intertidal Area
7/23/69	0	---	0	---	---	Visibility Good
8/11/69	---	---	17,500	Pinks	---	Iniskin Left
8/3/70	---	---	50	Pinks	---	Head Stream
			350	Pinks		Iniskin Left
7/15/71	0	---	0	---	Clear/calm	4 brown bear - 2 cubs
8/9/71	---	---	50	Pinks	Overcast/calm	Upstream
			1,000	Pinks		Iniskin Left
8/16/71	---	---	500	Chums	Overcast/calm	Portage Creek
			5,000	Chums		Iniskin Head
			1,200	Pinks		Iniskin Right
9/3/71	---	---	0	---	Overcast/calm	Portage Creek
			10,000	Chums		Iniskin Head
			500	Pinks		Iniskin Right
8/3/72	---	---	100	Chums	Overcast/calm	50 sharks
8/7/72	---	---	1,500	Chums	---	Iniskin Left
8/17/72	50	Pinks	900	Pinks	Clear/wind	Iniskin Left
			3,000	Chums		
8/24/72	---	---	7,800	Chums	Overcast/calm	---

Appendix Table 16 continued:

Aerial stream surveys - Iniskin - Kamishak Bay District
1965 - 1973.

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
8/4/73	---	---	600	Chums	overcast/calm	left
			2,000	Chums	overcast/calm	head
8/6/73	---	---	100	Chums	Overcast/calm	left
			1,000	Chums	overcast/calm	head
8/16/73	---	---	120	Chums	clear/calm	left
			9,550	Chums	clear/calm	head
8/29/73	---	---	2,900	Chums	clear/calm	head

Appendix Table 16 continued:

Aerial stream surveys - Ursus - Kamishak Bay District
1966 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/28/66	3,000	Pinks	10,800	Pinks	Windy	At mouth along beach.
8/ /66	---	---	5,000	Pinks	---	Right hand stream.
7/16/68	---	---	---	---	---	Heavy concentration of pinks reported.
7/14/70	---	---	1,500	Pinks	---	Counts are total for all streams within bay.
8/3/70	---	---	5,200	Pinks	---	---
8/12/70	---	---	23,000	Pinks	---	---
7/15/71	500	Pinks/Chums	0	---	Clear/calm	---
7/28/71	---	---	1,300	Pinks	---	6 boats.
8/9/71	---	---	6,350	Pinks	---	350 stream, 6,000 lagoon.
8/9/71	---	---	1	Pink	Clear/calm	---
8/3/72	1,200	Chums	5	Chums	---	Lagoon.
8/17/72	3,500	Chums	1,200	Chums	Clear/wind	Rt. stream off lagoon.
8/24/72	---	---	350	Chums	Overcast/wind	---
7/14/73	---	---	---	---	Overcast/wind	---
8/6/73	---	---	---	---	Overcast/calm	---
8/16/73	600	Chums	1,000	Chums	Clear/calm	Left stream
	---	---	60	Chums	Clear/calm	Head stream
8/29/73	---	---	2,950	Chums	Clear/calm	All

Appendix Table 16 continued:

Aerial stream surveys - Brown's Peak - Kamishak Bay District
1965 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
8/7/65	5 - 10,000	Pinks	---	---	---	---
7/24/66	0	---	0	---	---	---
8/ /66	---	---	11,000	Pinks	---	---
7/22/69	---	---	400	Pinks	---	---
8/11/69	800	Dogs	1,500	Pinks	---	---
7/15/71	500	Pinks	---	---	Clear/calm	---
8/16/71	---	---	7,000	Pinks	Overcast/calm	---
9/3/71	---	---	3,000	Pinks	Overcast/calm	---
7/12/72	0	---	0	---	Clear/calm	---
7/19/72	50	Pinks	200	Pinks	---	---
7/22/72	300	Pinks	300	Pinks	---	---
7/26/72	500	Pinks	400	Pinks	Clear/calm	---
8/3/72	400	Reds	900	Pinks/Chums	Overcast/calm	---
8/7/72	500	Pinks/Chums	600	Chums	---	---
			800	Pinks		
8/24/72	---	---	130	Pinks	Overcast/wind	---
			700	Chums		
7/17/73	---	---	20	Chums	Overcast/calm	---
8/6/73	---	---	3,200	Pinks	Overcast/calm	---
			150	Chums		
			20	Reds		
8/16/73	4,500	Pinks	500	Pinks	Clear/calm	most in intertidal hole
			500	Chums		

Appendix Table 16 continued:

Aerial stream surveys - Sunday - Kamishak Bay District
1965 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
8/7/65	---	---	1,800	Chums	---	---
7/24/66	1,500	Pinks	200	Pinks	---	---
8/ /66	---	---	20,000	Pinks	---	---
7/16/68	---	---	---	---	---	Heavy concentration of pinks reported.
7/22/69	3,500	Pinks	---	---	---	In front of creek.
8/11/69	3,500	Pinks	1,000	Pinks	---	On flat.
7/14/70	---	---	40	Pinks	---	---
8/3/70	---	---	2,000	Pinks	---	---
7/15/71	1,100	Pinks	---	---	Clear/calm	---
	100	Chums				
7/28/71	---	---	300	Pinks	Clear/calm	---
8/9/71	---	---	6,500	Pinks	---	4,000 lower stream.
8/16/71	---	---	15,000	Pinks	Overcast/calm	---
9/3/71	---	---	35,000	Pinks	Overcast/calm	---
7/22/72	250	Chums/Pinks	---	---	Clear/calm	---
7/26/72	3,500	Pinks	---	---	Clear/calm	---
8/3/72	2,000	Chums	700	Pinks	Overcast/calm	---
			1,000	Chums		
8/7/72	2,000	Pinks/Chums	2,000	Pinks/Chums	---	---
8/17/72	1,000	Pinks/Chums	200	Pinks	Clear/wind	---
			1,600	Chums		
8/24/72	---	---	1,750	Pinks/chums	Overcast/wind	Poor visibility.

Appendix Table 16 continued:

Aerial stream surveys - Sunday - Kamishak Bay District
1965 - 1973.

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/24/73	200	Pinks	200	Pinks	Clear/calm	---
8/6/73	1,000	Pinks	2,500	Pinks	Overcast/calm	---
8/16/73	1,000	Pinks/Chums	5,120	Pinks	clear/calm	---
			500	Chums		

Appendix Table 16 continued:

Aerial stream surveys - Bruin Bay - Kamishak Bay District
1966 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/24/66	300	Pinks	---	---	---	Near head end.
7/28/66	500	Pinks	14,000	Pinks	Windy	Head end.
8/ /66	---	---	15,000	Pinks	---	Head end.
8/25/66	---	---	5,300	Pinks	Clear	Head end.
7/11/67	---	---	500	Pinks	Calm	Scattered in stream.
7/31/68	---	---	---	---	---	Reports of ex. escape. on pinks.
7/22/69	300	Pinks	---	---	---	At Mouth.
8/11/69	---	---	5,000	Pinks	---	---
7/14/70	---	---	300	Pinks	---	Counts total for all streams
8/3/70	---	---	7,500	Pinks	---	--- within bay.
8/12/70	---	---	40,000	Pinks	---	--- "
7/7/71	0	---	0	---	Clear/calm	Bruin Head
7/15/71	---	---	20	Reds	Clear/wind	3 bears, 2 moose, Bruin Head.
7/21/71	---	---	---	---	Bad	---
7/28/71	---	---	1,500	Pinks	---	4 bears, Bruin Head
8/9/71	---	---	2,400	Pinks	---	Bruin Head
8/16/71	---	---	4,000	Pinks	Overcast/calm	Bruin Head
8/16/71	---	---	2,000	Pinks/Chums	---	Bruin Right
9/3/71	---	---	15,000	Pinks	Overcast/calm	Bruin Head
7/19/72	---	---	150	Pinks	Overcast/calm	---
7/22/72	---	---	200	Pinks	---	---
7/26/72	---	---	2,350	Pinks	Clear/wind	---
8/3/72	---	---	2,500	Pinks/chums	Overcast/calm	---
8/17/72	---	---	200	Chums	Clear/wind	---
			10	Reds		
			700	Chums		Bruin Right Creek

Appendix Table 16 continued:

Aerial stream surveys - Bruin Bay - Kamishak Bay District
1966 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/14/73	---	---	1,400	Chums	Overcast/wind	Bruin Head
7/17/73	---	---	2,500	Chums	Overcast/calm	Bruin Head
7/24/73	---	---	1,000	Chums	Clear/calm	Below falls - Bruin Head
8/6/73	---	---	1,000	Chums	Overcast/calm	Head
8/16/73	---	---	5,150	Chums	Clear/calm	all the way to forks
			2,000	Pinks		

Appendix Table 16 continued:

Aerial stream surveys - Amakdedori - Kamishak Bay District
1966 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/8/66	---	---	300	Reds	Clear	In pool, 100 yards upstream.
7/28/66	310	Pinks	3,000	Pinks	Windy	1,100 reds in stream, North Beach
8/25/66	---	---	5,200	Pinks	Clear	
			2,000	Reds		
7/11/67	200	Reds	---	---	Clear	---
7/22/69	---	---	1,000	Reds	---	Lower creek.
8/11/69	---	---	1,500	Reds	---	500 in upper creek, 1,000 below.
			1,000	Pinks		In lower creek.
6/24/70	---	---	100	Reds	---	---
7/14/70	---	---	250	Reds	---	---
8/3/70	---	---	2,500	Pinks	---	---
8/12/70	---	---	13,000	Pinks	---	---
7/7/71	---	---	30	Reds	Clear/wind	---
7/15/71	300	Reds	1,200	Reds	Clear/wind	---
7/28/71	---	---	1,000	Reds	---	---
6/26/72	0	---	0	---	Overcast/wind	---
7/5/72	---	---	200	Reds	Clear/calm	Lower river.
7/19/72	---	---	1,000	Reds	Overcast/calm	Lower river.
7/26/72	---	---	200	Pinks	Clear/wind	Lower river.
8/3/72	---	---	900	Pinks	Overcast/calm	---
			50	Reds	Overcast/calm	---
6/21/73	---	---	---	---	Clear/calm	Lake also surveyed.
7/14/73	---	---	---	---	Overcast/wind	---
7/17/73	---	---	600	Reds	Overcast/calm	Beaver dam, Rt. fork, 1 mi. up
7/24/73	---	---	2,220	Reds	Overcast/calm	Reds above beaver dam
			500	Pinks	Clear/calm	Pinks near mouth
8/6/73	---	---	1,500	Pinks	Overcast/calm	---
			1,000	Pinks		
			70	Reds		
8/16/73	---	---	2,000	Pinks	Clear/calm	---
			100	Pinks		
8/29/73	---	---	45	Reds	Clear/calm	Lake also surveyed.

Appendix Table 16 continued:

Aerial stream surveys - Chenik - Kamishak Bay District
1966 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/8/66	0	---	0	---	Clear	---
7/24/66	200	Reds	0	---	---	Off mouth from Amakdedori
	2,800	Pinks				to Chenik
8/25/66	Too turbulent to survey.					
7/4/67	2,500	Reds	0	---	Cloudy	3 schools off mouth of river.
7/11/67	400	Reds	0	---	---	---
6/24/70	0	---	0	---	---	Hi tide.
7/1/70	0	---	0	---	Good visibility	Jumpers at mouth.
7/7/71	0	---	0	---	Clear/calm	Chenik Lake.
7/7/71	2,000	Reds	0	---	Clear/wind	---
7/15/71	2,000	Reds	0	---	Clear/wind	---
7/28/71	0	---	0	---	Clear/calm	---
6/26/72	0	---	0	---	---	---
7/5/72	300	Reds	0	---	Clear/calm	---
7/12/72	700	Reds	25	Reds	Clear/calm	---
7/19/72	300	Reds	0	---	Overcast/calm	---
7/22/72	0	---	0	---	---	---
7/26/72	50	Pinks or Reds	300	Reds	---	---
8/3/72	0	---	0	---	---	---
6/21/73	---	---	---	---	Clear/calm	Lake also surveyed
7/17/73	300	Reds	---	---	Overcast/calm	None observed in Lake
7/24/73	---	---	50	Reds	Clear/calm	at far end of lake
8/29/73	---	---	45	Reds	Clear/calm	more fish deep/not estimated

Appendix Table 16 continued:

Aerial stream surveys - McNeil - Kamishak Bay District
1966 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/8/66	50	Chums	1,000	Chums	Clear	5 schools below falls,more abv.
7/28/66	---	---	50	Chums	Windy	---
8/25/66	---	---	100	Chums	Clear	---
7/4/67	0	---	0	---	Cloudy	No fish seen
7/11/67	---	---	2,000	Chums	---	Below falls.
7/21/68	0 1/	---	0 1/	---	---	Game man reported excellent show of chums.
7/22/69	---	---	300	Chums	---	Below falls.
8/11/69	---	---	500 - 800	Chums	Good	Just below falls.
7/1/70	0	---	0	---	---	Beaver Nelson reported few chums moving in today.
7/14/70	---	---	1,000	Chums	---	---
8/3/70	---	---	350	Chums	---	17 bears at falls.
7/7/71	8	Chums	---	---	Clear/wind	---
7/15/71	1,000	Chums	300	Chums	Clear/wind	---
7/28/71	3,000	Chums	1,500	Chums	Clear/wind	---
6/26/72	30	Kings	10	Kings	Clear/calm	---
7/12/72	---	---	320	Chums	---	---
7/19/72	---	---	1,000	Chums	Overcast/calm	---
7/26/72	200	Chums	350	Chums	Clear/wind	---
8/3/72	---	---	110	Chums	---	---
7/14/73	---	---	1,000	Chums	Overcast/wind	bears fishing
7/17/73	---	---	2,000	Chums	Overcast/calm	---
7/24/73	5,000	Chums	10,000	Chums	Clear/calm	best run in years, good visibili
8/6/73	300	Chums	2,000	Chums	Overcast/calm	17 bears at falls
8/16/73	1,500	Chums	1,900	Chums	Clear/calm	Est. 50,000 chums escapement

1/ Ground survey

Appendix Table 16 continued:

Aerial stream surveys - Mikfik - Kamishak Bay District
1970 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
6/18/70	----	----	200	Reds	----	stream-ground survey
6/20/70	----	----	700	Reds	----	stream-ground survey
6/24/70	----	----	300	Reds	----	stream-ground survey
7/1/70	----	----	350	Reds	----	stream-ground survey
7/14/70	----	----	30	Reds	----	Aerial-game Bio. stationed at McNeil;estimated 1,000 escapement into Mikfik
8/19/70	----	----	200	Silvers	----	stream-ground survey
6/21/71	----	----	----	----	----	Reds showed up in lagoon for 1st time today
6/30/71	----	----	600	Reds	----	stream-ground survey
7/7/71	1,500 (Lake)	Reds	300	Reds	clear/calm	Aerial survey
7/15/71	5,000 (Lake)	Reds	----	----	clear/wind	Aerial survey
6/26/72	2,000 (Lagoon + Bay)	Reds	3,500	Reds	overcast/wind	Aerial survey
7/5/72	2,000 (Lagoon) 10,000 (Lake)	Reds Reds	5,000	Reds	clear/calm	Aerial survey
7/12/72	10,000 (Lake)	Reds	100	Reds	----	Aerial survey
7/19/72	----	----	200	Reds	overcast/calm	visibility poor in lake
7/26/72	2,000 (Lake)	Reds	----	----	clear/calm	near Inlet stream
6/21/73	----	----	----	----	clear/calm	some bears + seals at mouth
6/29/73	----	----	----	----	overcast/wind	----
7/17/73	----	----	----	----	overcast/calm	----
7/24/73	----	----	100	Reds	clear/calm	at lake inlet
8/16/73	----	----	2,700	Reds	clear/calm	at lake inlet
8/29/73	----	----	760	Reds	clear/calm	at lake inlet

Appendix Table 16 continued:

Aerial stream surveys - Big Kamishak - Kamishak Bay District
1966 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/8/66	0	---	0	---	Clear	Too silty.
7/24/66	---	---	250	Chums	---	Right hand fork.
7/28/66	---	---	8,000	Pinks	Windy	---
			400	Chums		
8/25/66	---	---	13,000	Pinks	Clear	---
			5,000	Chums		
7/22/69	0	---	0	---	Good Visibility	---
6/24/70	0	---	0	---	Good Visibility	---
7/1/70	0	---	0	---	---	---
7/7/71	0	---	0	---	Clear/calm	---
8/16/74	0	---	11,000	Pinks	Clear/calm	---
			2,000	Chums		

Appendix Table 16 continued:

Aerial stream surveys - Little Kamishak - Kamishak Bay District
1966 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/8/66	0	---	0	---	Clear	No fish seen.
7/28/66	---	---	28,000	Pinks	---	Strike & Little
	300	Pinks	300	Chums		Kamishak
8/25/66	---	---	25,000	Pinks	Clear	---
7/4/67	0	---	0	---	Cloudy	No fish seen.
7/11/67	---	---	3,500	Pinks	Ceiling & Vis. Ex.	In Little Kamishak
6/24/70	0	---	0	---	---	---
7/1/70	0	---	0	---	---	---
7/14/70	0	---	0	---	---	---
8/3/70	---	---	2,000	Pinks	---	Lower stream.
7/7/71	0	---	0	---	Clear/calm	8 brown bear
7/5/72	0	---	0	---	Clear/calm	---
8/16/73	0	---	900	Chums	Clear/calm	minimum count
			12,800	Pinks		

Appendix Table 16 continued:

Aerial stream surveys - Strike Creek - Kamishak Bay District
1966 - 1973

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
7/8/66	0	---	0	---	Clear	---
7/28/66	0	---	28,000	Pinks	---	Strike and Little Kamishak
			300	Chums		
8/25/66	0	---	2,200	Pinks	Clear	---
7/22/69	0	---	0	---	Good Visibility	Water clear. No fish seen.
8/11/69	0	---	500	Pinks	Visibility Good	Spread out.
6/24/70	0	---	0	---	---	---
7/1/70	0	---	0	---	---	---
7/14/70	0	---	0	---	---	---
8/3/70	0	---	0	---	---	Pinks below jet in little Kam.
7/7/71	0	---	0	---	---	---
7/5/72	0	---	0	---	Clear/calm	---
8/16/73	0	---	2,800	Pinks	Clear/calm	---

Appendix Table 16 continued:

Aerial stream surveys - Douglas River - Kamishak Bay District

DATE	NO. FISH BAYS	SPECIES	NO. FISH STREAMS	SPECIES	WEATHER	REMARKS
8/16/73	---	---	700	Pinks	clear/calm	1/5 of stream surveyed
			500	Chums		unusual clear water
			20	Reds		

Appendix Table 17
Salmon catch, by species, Southern district, 1954-1973.

Year	Kings	Sockeyes	Cohos	Pinks	Chums	Total
1954	1,522	22,913	12,235	180,977	150,769	368,426
1955	562	30,848	3,230	565,216	24,398	624,254
1956	310	33,054	4,693	150,486	53,515	242,058
1957	286	19,431	1,507	130,511	57,403	209,138
1958	119	17,731	1,713	209,798	24,096	253,457
1959	74	10,026	709	50,076	15,278	76,163
1960	12	12,292	1,237	250,818	4,100	268,459
1961	39	10,180	1,161	191,911	2,924	206,215
1962	58	16,569	2,095	564,050	9,089	591,861
1963	88	13,142	4,020	99,829	7,695	124,774
1964	84	17,283	8,905	266,489	11,529	304,290
1965	10	11,229	733	90,330	2,459	104,761
1966	60	12,192	4,535	177,544	28,754	223,085
1967	173	26,350	2,393	95,100	23,416	147,432
1968	61	18,716	4,671	154,033	4,518	181,999
1969	59	12,578	485	70,753	2,600	86,475
1970	91	12,245	3,705	208,174	8,174	232,389
1971	41	18,403	3,151	50,066	2,857	74,518
1972	69	31,345	1,283	9,126	4,936	46,759
1973	139	24,072	1,241	97,574	3,588	126,614
Total	3,867	370,599	63,702	3,612,861	442,098	4,493,127
20 year average	193	18,530	3,185	180,643	22,105	224,656
Per cent	.1	8.2	1.4	80.4	9.9	100

Appendix Table 18.
Salmon catch, by species, Kamishak district, 1954-1973

Year	Kings	Sockeyes	Cohos	Pinks	Chums	Total
1954			--No fishery--			
1955		2	8	5,121	278	5,409
1956		67	701	193	14,936	15,897
1957		4,335	29	5,905	10,856	21,125
1958			--No fishery--			
1959		1,549	43	5,325	25,759	32,676
1960	11	768	28	11,563	44,328	56,698
1961		1	14	6,019	12,465	18,499
1962		20	11	219	6,058	6,308
1963	I	4	97	82,314	13,892	96,308
1964	5	1,979	115	21,719	42,280	65,098
1965		808	4	3,452	2,706	6,970
1966		21	247	2,945	12,688	15,901
1967	1	182	74	17,340	24,221	41,818
1968		492	101	198,253	49,461	248,307
1969	2	10,723	121	80,157	53,193	144,196
1970		2,888	220	23,583	95,857	122,548
1971		3	121	32,094	26,327	58,545
1972		47	31	342	26,374	26,794
1973		1	28	12,568	35,584	48,181
Total	20	23,890	1,993	508,112	497,263	1,031,278
18 year average	1.00	1,327	111	28,228	27,626	57,293
Percent	.01	2.32	.19	49.27	48.22	100

Appendix Table 19.
Salmon catch, by species, Outer district, 1954-1973.

Year	Kings	Sockeyes	Cohos	Pinks	Chums	Total
1954	13	4,927	369	82,205	112,877	200,391
1955	7	701	277	557,997	40,887	599,869
1956	23	2,889	190	42,368	19,248	64,718
1957	13	2,982	110	149,197	138,171	290,473
1958	1	1,719	83	739,768	100,386	481,957
1959	3	10,365	109	68,875	65,675	145,027
1960	4	1,336	533	328,501	67,187	397,561
1961	2	12,595	444	105,447	40,204	158,692
1962	2	8,697	1,893	1,684,023	126,750	1,821,365
1963	6	1,974	369	21,462	116,923	140,734
1964	2	1,370	431	767,396	269,512	1,038,711
1965	0	1,965	7	21,816	46,231	
1966	1	2,710	357	398,751	87,620	489,439
1967	2	2,165	56	259,951	37,533	299,707
1968	1	1,550	106	191,691	20,283	213,631
1969	0	92	11	51,533	5,400	57,036
1970	5	4,177	243	302,879	118,746	426,050
1971	11	1,630	174	310,710	118,995	431,520
1972	7	26,423	17	1,005	43,490	70,942
1973	1	5,064	30	197,259	76,341	278,695
TOTAL:	104	95,331	5,809	6,282,671	1,628,671	8,012,749
20 year average:	5	4,767	290	314,142	81,434	400,638
Percent:	--	1.19	.07	78.41	20.33	100

Appendix

Table 20. Salmon catch by species, Eastern district, 1954 - 1973.

Year	Kings	Sockeyes	Cohos	Pinks	Chums	Total
1954	0	11,786	2,556	7,562	1,945	23,849
1955	4	5,049	6,160	55,994	3,147	70,354
1956	0	296	3,761	14,873	519	19,449
1957	120	169	119	0	20	428
1958	0	0	0	200	0	200
1959	58	5,477	8,954	125	14,612	29,226
1960	0	105	853	8,720	467	10,145
1961			No Fishery			
1962	0	0	3,728	49	10	3,787
1963	1	1	2,250	11	0	2,263
1964	0	22	22	813	12	869
1965			No Fishery			
1966			No Fishery			
1967	0	348	203	3,097	275	3,923
1968	2	74,484	5	41,464	872	116,827
1969	3	99,403	6	1	10	99,423
1970	11	1,767	692	40,227	633	43,330
1971	21	2,198	1,115	1	423	3,758
1972	12	82	903	18,190	743	19,930
1973[1/]	5		801	2		808
Total	232	201,187	31,327	191,327	23,688	447,761
16 year average	14	12,574	1,958	11,958	1,481	27,985
Percent	.1	44.9	7.0	42.7	5.0	100

[1/] Salmon derby caught fish, not entered in total figures.

Appendix Table 21
Cook Inlet herring catches, by district,
in pounds, 1969 - 1973

Year	District	Pounds	Landings	Vessels
1969	Southern	1,103,041	41	5
	Outer	76,000	1	1
	Eastern	1,515,920	32	7
Total:		2,694,961	74	12
1970	Southern	5,417,385	104	11
	Eastern	4,200,550	81	11
Total:		9,617,935	185	22
1971	Southern	25,050	4	2
	Eastern	1,948,023	129	19
Total:		1,973,073	130	21
1972	Southern	2,046	1	1
	Eastern	190,068	14	6
Total:		192,114	15	7
1973	Southern	407,533	20	12
	Kamishak	486,395	33	8
	Outer	710,988	21	7
	Eastern	1,551,667	51	21
	Central	27,704	7	7 (set net)
Total:		3,184,287	132	28 (vessels) 7 (set net)

Appendix Table 22

Cook Inlet Subsistence salmon fishery
Permits Issued and Total Salmon Catch By District, 1967 - 1973

	Northern 1/		Central		Southern		Eastern	
Year	Permits	Total Catch	Permits	Total Catch	Permits	Total Catch	Permits	Total Catch
1967	218	2,947	13	119	51	942	91	262
1968	276	5,395	30	303	79	953	--	---
1969	290	1,563	40	400	85	1,067	32	929
1970	290	3,448	45	206	78	1,386	36	181
1971	9	10	28	138	112	1,618	19	7
1972	9	52	5	49	170	1,123	5	14
1973	19	168	104	252	143	1,875		0

1/ Northern district represents Northwest shore at Knik Arm